Leslie’s Journey

A story of life, courage, and grace

Ron Brown
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A story of life, courage, and grace as she fought an aggressively malignant glioblastoma multiforme.

To Jenny, the neuro-nurses Margaretta, Emelia, Anne, and Jane, and of course Mitchel Berger for your level of care as well as for your caring and respect for Leslie over the entire twenty month journey. You gave her an extra year and a half of active life - and I will be forever grateful.

And to Jamie … we both knew how special she was.

~ Ron Brown

Written as a tribute to Leslie’s strength and courage throughout this ordeal and based on the extensive journal I kept (initially for medical reasons - then as a way to remember). There were many triumphs along the way - as well as many issues, concerns, struggles, and disappointments. I hope that I have been able to convey how she dealt with it all.
Leslie’s Journey

This is a story about Leslie - about how she faced this disease without fear. It is about the struggles she had, but also the triumphs. How she was patient - willing to endure the difficult times so she could get back to living life. How she worked at getting better. How she worked at staying physically strong and mentally active, in touch with her friends, and just living life as best she could. How she worked at maintaining her language abilities as the disease was taking its toll. How she went through all of this and never despaired - never getting depressed, never being angry that she had to face this, and always accepting and then adjusting to whatever was happening at the time. It is a story of how she dealt with this with such courage and grace, knowing that it was ultimately going to take her, but that it was not going to defeat her. She was determined to just live her life - with all of her spirit and incredible sense of humor intact.

It’s been well over six years now since I received that terrifying cell phone call in which my wife Leslie could hardly speak - one or two words … then nothing. I knew that this was serious.

The first sign - although not yet recognized for what it was - actually occurred two weeks earlier in late April of 2010. Following a busy Friday morning helping set up San Luis Obispo’s Seven Sisters Quilt Show, we went to walk the Bob Jones Trail - to get out for some fresh air and just have a nice day together. Our son Jamie called her cell phone, but Leslie had difficulty talking with him - very halting, just a few words, then hesitation, as if it were a bad connection. She told him she would have to call back later. She turned to me and said, “Something is wrong, I can’t say anything.” The episode lasted only twenty or thirty minutes. It was strange, but we wrote it off as just being overly tired from the busy morning or dehydrated or she had some electrolyte imbalance or something as it passed quickly and she seemed fine again after some water, a short stroll, and then eating something. I suggested we call her doctor or perhaps even go to the ER, but she said she was fine, wouldn’t know how to describe it, and the episode seemed to be over anyway. I probably should have insisted. Over the next week or so, I watched her very carefully but saw no further indication of a problem.

But this episode was much more dramatic. I got that cell phone call just as I was leaving the golf course. She was unable to say more than one or two words before getting stuck. And she was obviously frightened. She could understand me – and could respond to my questions, sort of. “Is the same thing happening?”, I asked. “Yes,” she said, fully understanding my question. “Where are you?”; I asked. “Here.” “Where?” Nothing. “At home?” “Yes.” I got home as quickly as I could – she was standing on our front deck waiting and looking very frightened. As I approached the house, Jamie called my cell, just to talk - I told him I would have to call him back. He must have heard the tension in my voice. Leslie was still having great difficulty with language - it had not recovered at all as it had two weeks earlier. I took her blood pressure, which was very high - and her pulse was elevated as well. After talking to an on-call doctor, I rushed her to the French Hospital emergency room. My first thought, and that of the ER doctors, was that she was having a stroke.
By the time we got to the hospital, she was essentially non-communicative - confused and unable to follow verbal instructions. A CT scan of her brain showed a large shadow, and the young ER doctor said it was either a large subdural hematoma – possibly from a stroke – but most likely a tumor. And that was a terrifying thought. (I remember hoping there might be a third possibility.) She was admitted to the hospital overnight for monitoring and further tests and for an MRI the following morning. Sometime after midnight, I finally returned the many voicemails Jamie had anxiously left on my cell while we were in the emergency room to let him know what was happening, that his mom was in the hospital, that we would know more the next day, and that there was nothing either of us could do right then - but that it was very frightening.

Mark - I just wanted you to know, Leslie is in the hospital - so I won’t be able to play golf Friday. We are not sure what is going on, but she had an episode yesterday where she couldn’t find words and had a lot of confusion. I took her to the ER and a CT scan showed a large shadow on the left side of her brain. We don’t know if it was a stroke or something else - she has an MRI later today. Very scary. I’ll let you know more later. [Email to my frequent golfing partner who also knew Leslie.]

That MRI showed a well-defined tumor with very active margins. The on-call neurologist - David Filippi - said he was sure he knew what it was as he showed me the images – very likely a glioma, a primary tumor, and almost certainly malignant. It was about the size of a golf ball. He felt that the blocking of her language was due to seizures caused by pressure that the growing tumor exerted on the left temporal lobe, the language center of her brain. Then he turned to me and said, “I am so sorry. The next few months are going to be very rough for you both.” He said there was only one person that he wanted dealing with this (adding in what I came to learn was his glib manner, “I mean, I certainly wouldn’t want any of the local hacks digging around in there.”). He also suggested that I pick up some literature on the local hospice program (which I chose not to do - not wanting to even think about that possibility). Then he emailed a former colleague, the director of UCSF’s Brain Tumor Research Center, Mitchel Berger - an internationally recognized neurosurgeon who specializes in resecting these tumors – saying he had a case he might be interested in and sent him one of the images.

Leslie was discharged from the hospital late Friday morning, exhausted from the experience and frightened (as we both were), but fully able to talk and reason. We went directly home and she slept most of the afternoon. While I was on the computer trying to learn what I could, with my mind reeling with thoughts of what we might be facing, the office of Dr. Berger called asking if we could be in San Francisco very early Tuesday morning to meet with the doctor and discuss how to proceed. I commented that I was surprised he would hold office hours at 7:30 in the morning. His nurse responded that she was as well ... he never did. We owe much to David Filippi who sent the images to his former colleague referring Leslie’s case to him.

Mark - Leslie’s MRI showed a large mass on her left temporal lobe - very likely malignant. She is home now after two days in the hospital for tests and seems to feel okay given the circumstances. We see an oncologist on Monday, then a neurosurgeon at UCSF on Tuesday - should know more after that. We just don’t know yet what lies ahead. At best, I think we are in for a pretty difficult time over the next number of months. [My followup email]

That is how this twenty month journey began. We just didn’t know yet what was coming - but we knew it couldn’t be good. And we knew our lives had just changed forever.
LESLIE – Who she was …

We met in college. I was a third year graduate student - she was a junior majoring in classical languages. She was sitting with another student late one night in The Barn - the on-campus coffee house. I was taking a break from my work in the lab. I had seen her before on campus and this time she was with the other girl whom I already knew - and this seemed like a perfect time to go say hello and join them. As it happened, in addition to being cute, she was very bright, engaging, funny, and full of life - and she apparently thought I was at least interesting enough to talk to (later saying she thought at the time I was a reasonably bright sophomore). That is how it all started.

We were married just after I finished my degree - and she her first year of graduate studies. I had considered taking a research position with IBM in New York, but took a teaching position at Harvey Mudd College instead. It became clear that being an academic was what I wanted to do, and it seemed being an academic’s wife suited Leslie as well.

Leslie absolutely loved being a mom - and having the time flexibility that goes with a teaching position meant I could be a dad as well. And moving to the Central Coast to teach at the university in San Luis Obispo was good for us both. I was teaching at the university and she was at the local elementary school in varying capacities when not being a mom. School - hers, mine, and Jamie’s, youth soccer, violin lessons and youth symphony, getting Jamie to his many activities and just living life was how we spent those years.

After our son left home, we began spending our summers trailer camping in the western United States and Canada six or eight weeks at a time (that’s if you can call it “camping” when you take most of the comforts of home in a small trailer pulled behind you). Leslie so looked forward to those summer trips. We liked to hike - and our destinations were usually to special places we wanted to explore - Yellowstone and Glacier National Parks, Waterton, the Southwest, Utah’s Zion Park and Canyonlands, the Grand Tetons, the Sawtouh Mountains of Idaho, the North Cascades, Vancouver Island, and several trips to the Canadian Rockies. Those places and those trips were special. We were usually both our most fit on those trips - often hiking ten to fifteen miles on day hikes into the high country to get to places you can only see from the trail.

Leslie loved those trips. So we would hardly be home from one of those summer adventures before she would want to start planning the following summer’s trip.

I think my favorite trips were to the Canadian Rockies - and the spectacular hiking that we did in the high country above Lake Louise and Moraine Lake in Banff National Park - and the trips up the Icefield Parkway, to Bow Lake and the Athabasca Glacier on
the way to Jasper National Park and to Mt. Robson with the incredible mountains and the abundant wildlife - elk, moose, bear, mountain goats, big horn sheep. It all reminded me that we are just visitors here - that this country would be largely unchanged long after we are gone.

And those long and often strenuous hikes probably help explain how she was able to maintain her level of fitness after the disease encroached on her life and it became clear we could not continue taking those long trips. She still walked - a lot - with me and with her good long-time friend Colleen. And that was both important to her - and helped keep her strong.

She had always liked craft projects - early on she crocheted afghans, then it was needlepoint and counted cross-stitch projects. But at one point she decided to take a quilting class - and quilting became her passion. She loved all of it - taking classes, going to shows, planning projects, going through fabrics to pick exactly the right pieces, and then putting her incredible fine handwork to good use in the applique and embroidery work she would do in putting together the pieces for her quilts. But she often just put away the quilt-tops, and sometimes even just the squares, rather than finish the quilting. It was the projects that she loved, and she could lose herself in her studio for hours working on those projects. I’m sure she always assumed there would be lots of time to finish the quilts. Her Wednesdays were set aside to meet with her friendship group - to sew and to spend the day with her friends. And those days were very special for her.

She was also a life-long reader - always, continuously. She often had two or three novels that she was working on - a book to just lose herself in, or an audiobook that she could listen to while doing other things - or while on some long walk somewhere. She would always take two sets of books on our summer trips - the ones she wanted to read when she had quiet time, and the ones “we” read - she would read aloud while I drove to help pass the time on those long days on the road and that also gave us a lot to talk about along the way.

So when this suddenly came on her - it was not at all clear how it would affect all those activities that she loved to do. What we did know at that point was that she had a brain tumor - almost certainly malignant, and she would undoubtedly face surgery if the tumor was even operable. That was certainly our hope, of course, as frightening as that prospect was. But we wouldn’t know until Tuesday when we met with Dr. Berger at UCSF. We did know that we were seeing one of the world’s premier neurosurgeons specializing in operating on these tumors - and Leslie seemed to be very comfortable knowing that and resolute that we would attack this thing as best we could.

By Saturday, Leslie was feeling much stronger. We went into town almost as if nothing had happened - our usual Saturday. We walked the Bob Jones Trail, which we hadn’t been able to do that day two weeks earlier - and talked calmly about what might be next and how we would deal with it. There were no language problems and she seemed full of energy, and keeping in check whatever emotional turmoil must have been going on inside. While walking the trail, we even saw one of her former-teacher friends whom she hadn’t seen in a couple of years. Leslie talked with her for maybe twenty minutes catching up on her news - and never mentioned what she herself was facing. We stopped by the hospital to get copies of the MRI images to send to UCSF so they would have the full set before our consultation with Dr. Berger. We even stopped by her hair dresser’s shop to pick up some product she had ordered - and she joked with Rudianne about what a mess the hospital had left her hair in after just having it styled that Tuesday. I was amazed at how she was handling all of this. I think she just did not want to dwell on something we could not do anything about at that point.
On Sunday, Mother’s Day, she finally sat down to call her friends and let them know what was happening. She was so concerned about how she should tell them - not wanting to upset them and not wanting to make it sound any more dire than it already was, but to let them know where we were and that we had a plan, or at least a start of one, for now. I reminded her that they loved her and would want to know, and that she should just tell them what she knew at that point and that she would keep them informed as we learned more. Her first call was to Ruthie - her best friend from childhood who was almost like a sister to her - a nurse living in Arcata. They talked often, and she and Leslie would get together a couple of times a year - in San Francisco for a girl’s weekend on the town (I wasn’t invited!) and in Arcata at the start of our usual summer travels. That call was probably the hardest - but she was so good in explaining that this is just one of those things in life that happens and that have to be dealt with. I was so proud of how she handled that. After that long talk with Ruth, I think the other calls to her close friends here were much easier. (Her quilting friend Kathi told me later that when Leslie said “I have a brain tumor”, she kept waiting for the punch-line, expecting that to be the first line of a very funny excuse for her having missed the school fundraiser we had planned to attend that previous Friday night.)

The drive to San Francisco on Monday was pretty tense - for both of us - not knowing what to expect the following day. We saw our son Jamie briefly that night - and he had (as usual) done his own research and reassured his mom that she was in the very best hands to deal with this - Mitchel Berger was his first choice for any required surgery.

We met with Dr. Berger at the UCSF Medical Center first thing Tuesday and he showed us the MRI images of the tumor – a glioblastoma multiforme, he said, a fast growing malignant primary tumor in the left temporal lobe, the area of the brain responsible for language and language comprehension. He felt that it could be successfully resected with hopefully little or no damage to the rest of the brain if the surgery could be done very soon. Leslie had been concerned that this might be a metastasis from some other cancer site, missed because she had not had a recent checkup. But he said no, that these tumors initiate in the glial cells within the brain itself - and that no one knows what causes them. He said he was leaving for three weeks, and did not want us to wait that long for the surgery, so said one of his team would perform the operation (“and they are as good as I am,” without any hint of conceit in that statement). Leslie asked him what she could expect if she did nothing. “Maybe three months,” was his response. He added that these tumors are very fast growing - and that had they done an MRI just six months earlier, they probably would not have seen it at all.

Dr. Berger then said (very cautiously) that he would like the procedure to be an awake craniotomy – bringing her back awake after exposing the brain to map language function with her help. I had no idea how Leslie would respond to that, thinking the idea might just be too much to deal with. But she didn’t even hesitate saying that is what he should do if it would help him toward a more successful outcome. Leslie liked - and trusted - Dr. Berger immediately, and I think it was mutual.

We were on our drive back home on Wednesday, when we got a call from his office asking if we could return the next day to prepare for surgery on Monday – and that Dr. Berger had decided to perform the operation himself. (Jamie’s comment was, “Mom must have charmed him”.)
Surgery and Recovery

Friday was for pre-operation meetings and tests at UCSF. Neuro-psychologist David Perry went slowly over the words and images with Leslie that would be used in testing her during the awake portion of the surgery. He explained that after her brain was exposed, she would be brought back awake and shown these same words and pictures - line drawings of common things - and would be asked to quickly say the words or identify the objects as Dr. Berger stimulated her brain with electrical impulses in an attempt to block her responses so he could locate the margins that would have to be avoided to protect the language and comprehension areas of the brain. (At one point when Leslie hesitated on one of the pictures, Dr. Perry asked if she was stuck. She responded, “Well, it’s supposed to be a violin, but it doesn’t have a chin rest.” He looked back at the picture a bit surprised and admitted he had never noticed that before!) She also had a magnetoencephalogram to measure neural responses to create a functional map of her brain to identify those specific areas responsible for language and for responses to various stimuli - verbal, visual, and tactile. This MEG would be used together with MRI images to assist in the brain mapping necessary for a successful resection of the tumor while avoiding damage to an otherwise healthy brain. The surgery was scheduled for first thing Monday morning, twelve days after that frightening cell phone call.

Surgery – May 17, 2010

The surgery itself took about seven hours. Dr. Berger met with Jamie and me immediately after the surgery and explained that it all went very well, that Leslie was a great help during the awake portion with the language mapping, and that the tumor was successfully removed to the extent possible (there are always cancer cells remaining) – a “complete resection” according to the surgeon’s report. We learned later that Dr. Berger had left for a conference in New York just after we met with him the previous Tuesday, flew back to do the surgery on Monday morning, then returned to the conference in the late afternoon (and called his team in the middle of the night to see how she was doing). Never let it be said that these doctors do not care deeply about their patients.

Leslie remained in the neuro-ICU for two days for continuous monitoring as she began her recovery. Once awake, she was largely incoherent and very agitated - and didn’t seem to know where she was. When awake, she would say “I don’t want him here,” and continually asked, “Is he gone?” and was very agitated that we couldn’t answer her. Was “he” the surgeon - and she wanted that to all be over? Was she blaming me for letting this happen to her and she just didn’t want me there? Did she not want Jamie to see her like that? Then Jamie guessed that she meant the tumor and said reassuringly, “Yes, he is gone, they got all of him.” And she immediately relaxed. Even in what seemed like an incoherent state, she understood why she was there and what had happened to her. An MRI later that night showed that the tumor had been removed as much as is possible – none of it visibly remained either during the surgery or in the MRI images. There would be considerable swelling for awhile – and that would affect how quickly she could recover. But one of the neurosurgeons, part of Dr. Berger’s team, was reassuring that the procedure was very successful.

But, for me, it was still all very frightening as we did not really know how well she would recover, whether there might be significant changes in her neural functions and mental capabilities, whether she would have full use of language, or if she would even still be who she was.
Recovery

On Wednesday, she was moved out of the ICU to the neuro-recovery floor. Her cognitive abilities, speech, and motor functions were already beginning to return. Her speech was slow and halting, and she had difficulty finding words - and often did word substitutions, but she was able to carry on some conversation and understand some of what was being said to her. Her motor functions seemed intact, although she was not very balanced and was very slow when she tried to stand or move around (even with help). That first night on the neuro-recovery floor was difficult for her. She was very compromised with both language and coordination, and was exhausted. She would sometimes get stuck on a word - and would keep saying that word over and over even if she knew it wasn’t what she was trying to say. It’s called perseveration and is common with brain trauma (including surgeries). Dr. Perry had talked about that possibility. Communicating with her that first night was difficult.

As Leslie was getting ready to go to sleep for the night, she started looking for something saying, “I need my mouse.” I had no idea what she was looking for. She got more and more agitated repeating “I need my mouse, I need my mouse!” She even seemed upset with me that I did not understand what she needed. I asked if it was something she had brought with her to the hospital. She said yes. So I took the bag which had her clothes and other personal things and took items out one at a time asking, “Is this it? Is this what you need?” She was getting more and more agitated saying, “No! My mouse!” I finally asked her what she did with her mouse. She just looked at me and slowly brought her index fingers up and put them in her ears. I said, “Your iPod?” “Yes!” as if I should have known what she meant all along. She has always liked listening to something while sleeping - and her gesture made perfect sense. So I went to the parking garage to look for her iPod in the glovebox of our car. When I returned to her room with it, she said “No, not that! It’s black!” looking incredulous that I didn’t know what she needed. “In the car!” So … I went back to the car and finally found her tiny black Sony AM/FM radio that she often listened to in motel rooms when we travelled. Of course, the reception in the massive hospital was almost non-existent - and she finally fell asleep without being able to listen to her favorite San Francisco station.

By the next day, there was noticeable improvement in her capabilities – although she would tire very quickly and would then sleep. Some of the surgical team, physical therapists, and a Dr. Jennifer Clarke, a neuro-oncologist from the Brain Tumor Research Center came by to see her. Dr. Clarke explained some aspects of the followup treatments and also briefly discussed a clinical trial that she and her team were conducting that might be appropriate as part of the followup treatment of the cancer – an attempt to improve on the standard protocol of radiation and chemotherapy. I don’t think Leslie followed much of that discussion. And I knew we would hear more about it sometime later.

It was reassuring when signs of her sense of humor returned. An occupational therapist gave her a number of small physical tasks she wanted her to do in sequence as a test of how well she could first understand and then carry out the instructions (a test, it turns out, for receptive aphasia as well as her post-surgery dexterity). Leslie turned to me and said, “Like I’m going to do what she says!”, with a wry smile. And then she proceeded to do all the tasks in order without hesitation. The real Leslie was definitely still there - personality and all. By the next day, she was able to walk around the hospital hallways with only a little assistance - just to be sure she didn’t fall. She was determined to get better. It was remarkable how much improvement there was in a very short time.
Hi Bill,

I thought I should let you know what has been going on here - and the news is not good. I'm fine, but Leslie is not. A couple of weeks ago, she suddenly had trouble with getting words out so we went to the ER where a brain scan showed a large mass on her left temporal lobe right over the language area of the brain. The neurologist who looked at her MRI knows the chief of neurosurgery at UCSF who specializes in these brain tumors (and is internationally recognized). He scheduled an appointment right away and then we returned to have him do the surgery on Monday. (It was an awake craniotomy so that they could map her brain while asking questions during the procedure). The tumor was successfully removed and she is now recovering rapidly - although it is a long process. The good news, I think, is that it was a primary tumor and not a metastasis from some other cancer site. We are very hopeful.

She is doing well under the circumstances and is no longer in the primary care wing but is being moved to an acute rehabilitation facility so that she can recover well enough to go home. And she is doing great given that the surgery was only five days ago! After we go back home, she will need radiation and chemo and they can be done locally. There is a lot ahead of us that we have to deal with - and we are still just trying to process it all. But we have been very lucky so far given what happened and we are hoping for the best in all of what is coming.

By late Friday, she was transferred from UCSF to the St. Mary’s Hospital Acute Rehabilitation floor. The purpose was to facilitate further recovery and begin working with her on motor skills, “occupational” skills, and speech – so that she would be able to function well once back home. It was pretty much a lost weekend - just lying around waiting to meet with the hospital therapists on Monday. So by Monday, one week after surgery, she was able to walk comfortably and balanced, climb stairs, find her way around the hospital floor, etc. – her strength and balance and motor control were sufficient for functioning outside the hospital. She was walking laps around the third floor of the hospital in between sessions with the physical, occupational, and speech therapists - and was identified as “high functioning” by Tuesday – all within only five days of getting out of the ICU! In retrospect, we were not sure how valuable the week in rehab was for her. But I was immensely proud of her and how quickly she was able to do so well - even recovering much of her language. Even though we both knew we had a lot ahead of us, it was nice to have Leslie back.

One evening, after Jamie had been visiting with his mom, he texted me:

_Dad - just so you know, even with your PhD in physics, you have dumbed down the Brown family gene pool. Mom is the only person I know that only a few days after major brain surgery, could use the word 'acquiesce' correctly in a sentence as part of a verbal work-around when she couldn’t say what she initially wanted to say._

While in the rehab hospital, Leslie became concerned that we had been away from home longer than expected and had a lot of household bills about to become due. She had always been the one to take care of the household finances and record keeping. So I thought I was going to need to make a quick trip to San Luis Obispo just for a bill-paying session sitting at her computer at home. But just in case, I opened my laptop to try to log on to the bank and other account sites - and she remembered every one of the usernames and passwords to get into those accounts! In one short evening working together, we were done paying bills. Apparently neither the tumor nor surgery had diminished that capability - and her language and memory seemed to be nearly intact!
Her sense of whimsey quickly came back as well and was seen in her emails to her friends (I usually wrote as she dictated, as she wasn’t yet able to use the computer). She sent pictures of herself with half her head shaved and her large scar (and staples) - touting her new look. Leslie’s first email to her dear friend and walking companion Colleen (including a photo of her holding a dancing bear Colleen had given her):

Dear Colleen - I think we can safely say the bear can dance! I’ve been asked to leave here Friday. I think (in my humble opinion) I am too high functioning in most areas to warrant the services of an in-patient facility. When I come back, we can spend some walking time discussing how high functioning I am. Since we have a meeting with our “team” on Tuesday, we will spend the weekend in SF and drive home later in the week. I hope to have my staples out on Friday although I’m not looking forward to that procedure. There will be some gnarly things to do when I get home, but I’m looking forward to being home putting the pieces back together. I love you and am looking forward to seeing you. Leslie

And to her dear teacher friend Wendi Craig a day or two later:

Hi Sweetie - I got kicked from the rehab - they clipped my staples before I left. I'm not sure I look better, but I look a little less hard-rock. My language and writing are still odd and I was so tired by the time we got to the motel. We will still be here until Tuesday when we have our meeting with our “team”, then we will probably come home Wednesday. I’m anxious to see you face to face so I can get my arms around you. Craig is a good substitute, but I miss you. Love you, Leslie

[“Craig” was her name for the big stuffed bear Wendi had sent.]

Seraphina, a former student of mine who had essentially adopted Leslie as her mom-away-from-home while still a student, had been living with her husband and daughter in Russia for three years. I knew I had to let her know what was happening, but wanted to wait until Leslie was recovering before I emailed her. I also knew that Sera would be hit pretty hard by this news.

Dear Sera and Andre - I hope all is well with you all - and you have survived yet another Moscow winter!

I have some news - and it is not at all good, but it is so much better after this past week than it could have been. About two weeks ago, Leslie rather suddenly had great difficulty speaking - a complete blockage of language. It was very scary - we went to the ER thinking it might be a stroke only to have an MRI show a large mass on her left temporal lobe. That is the region of the brain that controls language (of all things in a person with such a command of it!). The neurologist who then looked at the scan images knows the chief of neurosurgery at UCSF who then rearranged his own travel schedule in order to remove the aggressive tumor last Monday. Her recovery has been amazing. After a couple of days in the ICU, she spent three more recovering in the UCSF hospital and is now in a rehabilitation facility from which she will be discharged Friday morning. Each day she is noticeably better - doing both physical and language therapy (although there really is little reason for physical therapy - she was walking a couple of miles at a time around the hospital corridors just six days after the surgery!). So except for some language and cognition issues - which could just be due to the swelling that is likely to take awhile to completely subside, she is doing terrifically well. Her post-surgery treatment will be done in SLO - but still managed by the neuro-oncologist at UCSF that specializes in this particular type of tumor. We were incredibly lucky under the circumstances. Not out of the woods, of course, since there is a lot left to do with no guarantees. But we are very hopeful and her spirit, intelligence, and sense of humor are intact.

Love to you all, Ron and Leslie
Sera called my cell phone from Moscow as soon as she could after seeing my email and we talked for an hour or more as I walked the rehab hospital’s corridors. Leslie loved Seraphina, and it was mutual. Leslie even stayed with Sera for a week three and a half years earlier when Liliana was born, as Sera had lost her own mom to cancer by then. Leslie loved that (about as close as she ever came to having a grand-daughter of her own!). So her call meant so much to us both.

Ron: As a "Language nut" I’m curious about the specific symptoms you noticed: Was the issue lexical, phonological, grammatical, or a combination? Was the problem that she couldn't understand others or was it transmittal? Was she aware of the problem and perhaps frustrated, or oblivious to it all? Keep me posted when you get a chance. Love you guys. Bill

[Email from by brother - who was especially interested in how her language was affected.]

Hi Bill - Thanks for your note and good questions. The short answer is mostly lexical, some grammatical, and primarily transmittal. In her words when she describes the problem, she just "loses her words". Except for those two severe language blocking episodes, she is sometimes just unable to retrieve some word or combination of words she wants to use - and either hesitates or sometimes just substitutes some other word (nouns for nouns, verbs for verbs, etc.) and she mixes gender nouns and pronouns (he/she or him/her or man/woman or boy/girl, etc.). In some ways, it isn't much different than what people do anyway - just much more often than expected for someone with such a command of language. Her speech itself is clear - but is now slower, hesitant, and sometimes words just aren't available to her. But she has no problem following what is said to her and can process it normally. And if I can anticipate what she wants to say - I can sometimes guess what word she is fishing for, and she always can say whether my guess is right or not. That is, it is not that she doesn't know the word, she just can't retrieve it. In retrospect, there may have been earlier signs - that is, she has said she has been losing her words more often - even before those two severe episodes.

But she is very aware when she is having the word-finding problems (sometimes even when the rest of us don't realize it because she works around the deficit) as well as some other cognition issues. She can follow what is said and can carry on an intelligent conversation better than she can read something. That could be due to a lot of things - some swelling still in the brain from the surgery itself or the levels of medications she is on - or possibly some neural function loss due to damage done by the tumor itself - only time will tell for sure. But she is definitely still there - bright, funny, hopeful, and driven to get better. So, given the circumstances, she is doing great.

Love you too, Ron

We spent the four-day Memorial Day weekend in San Francisco after she was discharged from St. Mary’s since we had a follow-up appointment with Dr. Jennifer Clarke on Tuesday. We were even able to do our usual five mile walk from our hotel along the Marina and Crissy Field (although not as quickly as we had been prior to all of this and mostly to prove she still could), shop for clothes at Chico’s and REI, go out to dinner, and socialize some at the 540 Club - our son’s bar! Amazing. I think it was all her way of saying she wasn’t going to give up - that she still had a life to live!

Tuesday morning, we met again with Dr. Clarke, the neuro-oncologist at UCSF’s Brain Tumor Research Center specializing in the treatment of these tumors and principal investigator on these clinical trials. She explained in more detail the clinical trial she had mentioned the previous week in the hospital. The point of the trial, she said, was to aggressively attack the cells that remained from the resected tumor with a “three-pronged” chemotherapy approach. In addition to the standard protocol of six weeks of targeted radiation and simultaneous chemotherapy, the clinical trial was to add two additional concurrent chemotherapy drugs including an infusion that would be administered at UCSF every two weeks – all with the goal of preventing any further tumor growth.
After returning home, we saw her various San Luis Obispo doctors who would serve as her local team during her followup treatments. The big question was whether to also add the clinical trial to the standard protocol. All of her local doctors, her internist, cardiologist, neurologist, and medical oncologist thought the clinical trial would be her best option. (Her cardiologist, Michael Famularo, even returned from his vacation early when he heard what Leslie had just gone through and that she needed to decide soon whether to proceed with the clinical trial. One of the chemos could affect kidney function, which he monitored, and he wanted to be able to discuss the options with her. Amazing.) Her blunt neurologist, with his gift for words, said, “You have to do it, the standard protocol is crap. There is only a two percent chance of surviving this.” Leslie was in tears when we left his office. “He thinks I’m going to die,” she said when we got to the car. “He probably means if we were to do nothing more,” I said. “That’s why I think we should attack this as aggressively as we can. You are otherwise very healthy, you just had a complete resection of the tumor, and you have one of the best medical teams on the planet working with you on this. I think you have the best chance possible for success.” She thought about that a moment and responded, “Okay then.” Then she added, “I know that both you and Jamie know, because you have surely researched it by now, but I don’t ever want to know what the statistics are with this.” A deep breath, and then, “Can we go somewhere for lunch? I’m starving.” I never discussed with her what is typical with glioblastomas. (But I also don’t think she would have said what she did had she thought the prognosis was good.) I think David Filippi’s two percent number was the statistical five-year survival rate.

We certainly wanted the best opportunity for success and were willing to commit to the trial – with the understanding that it would also add side effects which might be very unpleasant and could potentially be harmful or even intolerable (which would then require abandoning the trial). So there was a lot of uncertainty in opting for a clinical trial - that is, it is a trial and not a standard-of-care treatment. But all of her doctors seemed to think that the trial would give her the best chance of success. (And that just reinforced for me the poor long-term success rate in fighting these tumors.)

We committed to the clinical trial administered by the UCSF Brain Tumor Research Center. Jennifer Clarke would be the neuro-oncologist in charge of her treatment - and assured us she would always be in contact with her local docs, something we were concerned about when we first contemplated having so many doctors involved, both in San Luis Obispo and in San Francisco.
The Clinical Trial

The trial itself would include the standard-of-care protocol of six weeks of radiation therapy five times a week (which could be done locally) along with a daily dosage of Temodar - and then add two other chemotherapies, Tarceva taken daily and biweekly infusions of Avastin administered at UCSF. Nearly all of these, including the radiation, have side effects which can include nausea and fatigue, among other things. So additional meds would need to be taken to try to counteract some of those effects. This multi-prong approach was intended to attack the remaining cancer cells with radiation while also preventing cell division and growth. Avastin, a fairly common chemotherapy for some other cancers, is an angiogenesis inhibitor - and is intended to inhibit cancer cells from developing their own blood vessels by which they feed themselves. Temodar is designed to inhibit cell division while Tarceva is a cell growth inhibitor. All of this was intended to block the essentially inevitable growth of new tumor. Even with a complete resection, there is almost always tumor recurrence - and often in a relatively short time. The progression free period is typically only a few months after surgery, radiation, and chemotherapy with the standard protocol. This trial was to see if attacking three different mechanisms by which the cancer grows would inhibit further tumor progression for a significantly longer period - and perhaps even starve the cancer so that it could not recur. The plan was for Leslie to stay on this regimen for at least a year - and perhaps two, depending on how she responded to the treatment, both in keeping the cancer at bay and in how she tolerated such an aggressive approach. I did not ask what happened after the year - or “perhaps two”, as they had said. Maybe I just did not want to hear that these tumors nearly always recur by then, and the treatment protocol would have to change as these tumors develop their own resistance to the drugs designed to prevent progression - and that the three most promising drugs would have already been used.

On the drive back home, Leslie asked me, “Are you going to be able to do this?” Her question surprised me. But I think she was referring to the trips to San Francisco every other week for treatments as well as whatever else would be needed to support her in this fight. I responded immediately, “Absolutely.” My concern was not whether I could do it, but whether she could. We just did not yet know whether the drugs would have debilitating side-effects which could then make those trips to San Francisco as well as everything else very difficult or even impossible for her.

Over the next few weeks, her language abilities continued to improve and she began walking regularly again with either her best friend Colleen or with me (and I think she preferred Colleen). By mid-June, she had continued to improve in both her strength and stamina as well as her language. A month after her surgery, she was doing some reading and writing and was having much less difficulty with word finding - and she was walking 4-5 miles nearly every day. She has always pushed her limits - and getting her strength and skills back were certainly motivation for her.

Dear Stephanie,

Thank you for your note - you have no idea how much it meant to me. Yes - it IS wonderful news that she is recovering well. It doesn't change that there will be a lot to deal with over the next many months, but at least at this point she is alive and doing well. We are home now - after being away for three weeks or so. (It is actually hard to believe that just a month ago, neither of us had any idea that this was in our future! That is how suddenly all this has happened.) So it is nice to be back home, go on our walks down through Baywood Village or the Bob Jones Trail, for her to talk with her friends, etc. And she actually went in to her hair stylist the other day - to see what to do with the two-thirds she has left, since her left side was shaved for the surgery! So she now sports a very short pixie look - and it becomes her, actually, although I'm not sure she is convinced! (I told her not to think of the long circuitous scar she has as something that needed to be covered, but rather as the autograph of
The biggest effect of the tumor and surgery at this point is that she still sometimes has a difficult time retrieving words she wants - and has difficulty processing what she reads. And those are things most people really don't notice. So that is all very hard for her. Her fear, I think, in addition to the obvious, is that she may not be able to recover those abilities. I'm guessing her abilities will continue to improve with time as she continues to heal from the surgery and the brain forms new neural processing pathways. She is pretty apprehensive about the treatments which begin in a week or so.

[Stephanie is another of my dear former students with whom I’ve remained in contact. She and Leslie never met - but both felt they knew the other from my talking about them.]

Leslie had always been a reader - probably a book-a-week for most of her adult life. She always seemed to have a couple of novels she was working on, actually, sometimes both written and audio. So she generally had two (or maybe even three) stories that she was keeping alive, and would read or listen to depending on what else she was doing or just to fit her mood at the time. That all changed with this attack on her brain - between the tumor and the surgery. She suddenly had a difficult time following a paragraph of text - much less a book - and keeping the details straight. So the release of Apple’s iPad - just three weeks before her first symptoms - was an amazingly fortuitous coincidence for us. When it first came out and we saw the splashy ads, neither she nor I could imagine why one would want such a device, especially since we already had laptops and smart phones - until we looked at one just before we returned home from her stay in the rehab hospital. And it just seemed like an obvious purchase - a “no-brainer”, if that is not too insensitive to say under the circumstances. When we first brought it home, it was difficult for her to work with - but she soon discovered that it was a wonderful tool to help her regain her reading and writing skills. She could expand a paragraph of a friend’s email to fill the screen - and make it so much less overwhelming to read since she could more easily focus her attention on the text. And she could much more easily write her friends on the iPad than sitting at the computer - even though she was initially fairly slow at it. She downloaded books and could zoom in on the text so she could focus her attention so much better, could insert bookmarks, could double-click words to bring up the dictionary, or names to find some reference to that particular character if she forgot who they were or what role they played in the story. And as her reading improved, she required less help. She was not as fast a reader as she once was, and might never be again - but she could read a book and enjoy it. (It took her a long time to get through her first novel after her surgery - but she had a real sense of accomplishment at its completion.)

Dear Sera,

Thanks for calling and writing yesterday! I’m sorry we haven’t gotten back right away after your previous email - but it has been pretty hectic around here - seeing various local doctors nearly every day! Actually, Leslie is doing spectacularly well, given the circumstances. As I said when we talked while she was still at the rehab center, she came through the surgery very well (it was a difficult surgery - and by all accounts, the tumor was removed as cleanly as possible and the surgery did remarkably little or no damage to good tissue). So she has done well physically - walks 4-5 miles when she can - and has recovered much of her language, both in speech and writing. So although she does tire easily, her spirit is great and she is dealing with all that is in front of her amazingly.

So now the task is to follow up with radiation and chemo treatments which begin this week. She has enrolled in the clinical trial that adds two more aggressive chemo treatments to the standard radiation and chemo protocol. One of the added treatments is an IV drip which has to be administered at UCSF every two weeks. So we will be traveling a lot! But we feel (as does every doc we have spoken with about this) that this gives her the best chance to fight this disease. So we are hopeful (and are hoping that the effects of the chemo are not too debilitating).
Radiation and Chemotherapy – mid-June

The next step was to begin the six week regimen of radiation treatments, which could be done locally, and to begin chemotherapy. The radiation treatments were much more difficult than either of us had imagined. The 3D conformal targeted radiotherapy is a computer controlled method to focus x-radiation at the carefully mapped specific areas of tissue surrounding the surgical cavity where the tumor had been in order to destroy any remaining cancer cells (but while doing minimal damage to good brain tissue). It required creating a mask to hold her head absolutely still for the daily five-to-ten minute exposures. That process was enormously confining and claustrophobia inducing. The mask clamped down to the table she was on to hold her head in place and completely restrict any possible movement. And that was very frightening for her - and she hated it. She would take Ativan in order to calm herself enough to be able to do the treatments without panic, but that left her feeling dopy and lethargic for much of the remaining day, and she often slept after the treatments. In addition, the radiation treatments themselves left her very fatigued - both mentally and physically. So she had very little energy for anything - and often just came home from the treatments and went to bed. She felt pretty debilitating for most of that period of six weeks. There were no radiation treatments on weekends, which was a welcome respite, but some of her time on Sunday evenings was just spent dreading the coming Monday when they would start again. By Thursday of each week, she would say, “I can surely do this for one more day,” and that kept her going. The biweekly trips to UCSF to see her doctor and to have infusions were actually welcome changes from that routine.

When the chemo treatments (which Leslie referred to as “poisons”) first began, the side effects did not seem to be too noticeable. There were the daily Temodar capsules and Tarceva pills (which came with a warning to never to touch them!) which were initially okay. And the Avastin pills, administered in the Clinical Research Center at UCSF, did not cause the nausea we had expected. We even did the five mile Crissy Field walk the morning after her first infusion (I think just to prove that she could!) But as we were returning from that walk, she said, “It’s starting.” She had a nose-bleed - one of the possible side effects of this drug, and we wondered if this was going to be an issue as even potentially severe internal bleeding is a possibility with Avastin which would then require curtailing the treatments. But that first time was the only time it happened. But it again reminded me that we were in somewhat uncharted territory with this trial. After she had been on all three “poisons” for a few weeks in addition to the radiation, she began feeling some of the other side effects of the various drugs – none of them debilitating, exactly, but they were definitely present and very annoying. There was some nausea, although not severe - but fatigue was the biggest issue and it was hard to know which of the various treatments was the cause. She generally felt pretty compromised by all of this and did not feel at all like going on her usual walks (or doing much of anything else, for that matter). Her appetite, however, was not affected, nor was her sense of taste - so she was able to eat just fine and still enjoyed her meals. It was nice that at least that part of our lives did not have to change.

Our routine was pretty set for that six weeks starting in mid-June. Every weekday we drove into town for radiation treatments, then back home to take it pretty easy, have lunch and then she would nap in the afternoon. And every other weekend, we returned to San Francisco for another infusion. We enjoyed those trips, actually - turning them into three day vacations. It gave us a lot of car-time together to talk (if she didn’t sleep). We would leave right after the Friday radiation treatment in order to get to UCSF for a late afternoon appointment at the Medical Center followed by an infusion at the Clinical Research Center across the street in the hospital. Then it was off to dinner - often at one of the restaurants on Steiner near our hotel - and to see Jamie at the 540 Club if he was not too busy. We liked to walk on Saturday mornings - and sometimes Sunday as well - if she wasn’t too tired. That wasn’t always possible while still having the radiation treatments, but became our routine after they stopped and she started feeling better again and regaining some of her stamina.
About three weeks after starting the radiation and chemotherapy treatments, while on one of those weekends in San Francisco, there was a sudden problem. Leslie awoke one Saturday feeling okay, then after a short walk to the market to pick up something to take back to our hotel room, she suddenly got very nauseated and very weak with a lot of intestinal distress. I called the clinic and the on-call neuro-oncologist said to take her directly to hospital emergency. That led to an overnight hospital stay. She had been in a potentially serious sodium depletion crisis and was very dehydrated. After lots of blood tests and IV fluids, she was finally stabilized and started feeling okay again. But even that crisis did not seem to affect her spirit - she just took it in stride with her usual sense of humor. (When a young intern who was filling out the admitting forms came to the question “Are you in good health?”, Leslie simply looked at her and replied, “Do you mean besides the obvious?” as she lay on the hospital bed in the emergency room with the fairly angry scar from her major brain surgery still very much evident.)

That crisis was triggered by an interaction between one of the chemo drugs and a relatively high dosage of an anti-seizure med prescribed to reduce the possibility of seizures that are common following any brain trauma. A change to a different anti-seizure medication allowed reducing the dosage of one of the chemo drugs and brought immediate improvement. She was less fatigued, had little nausea, and just generally felt much better. Although the ER incident was scary - and potentially dangerous, it led to an important change in her medications and she felt much better.

Not long after this all began, our son Jamie recalled having seen a ring in a San Francisco jewelry store many years earlier - a simple sterling silver piece engraved continuously around the outside of the ring with the inscription “...onandonad
Living with Cancer – The New Normal

By the first of August, things started getting much better. We had both looked forward to completing the radiation treatments that last week in July with the hope that things would then become a bit more normal. The chemo meds stopped for a three week hiatus as well when the radiation treatments were completed. So Leslie was free from any treatment for awhile and that gave her some time to recover and regain some of her stamina. And we hoped to see some of the side-effects of the drugs wane a bit as well (although very annoying, they had been rather modest as these things could go). As difficult as that period had been for her, Leslie handled it all very well - and was very patient through it all. And by mid-week after going off the treatments, she was already feeling better. She was walking several miles each day again – although then resting much of the remaining time. She was sleeping well and eating well. So after nearly three months, she was feeling better - more alive and active. She got through the difficult period of radiotherapy and showed that she could tolerate the aggressive chemo treatments. Through all of this, she had lost about twenty pounds from where she had been when this all started (although she had already been shedding a few pounds through diet and exercise). Her appetite was good and she was eating well, but she still couldn’t maintain her weight. One of the side effects of the chemotherapies was that she was cold all the time - the drugs seriously affected her metabolism as well as her thermostat, it seemed. And I suspect all of that meant she was expending more energy - hence burning more calories - just to try to stay warm which also contributed to her fatigue.

This was the start of a very good period, many months of feeling good, being active and energetic - after the devastating diagnosis of nearly three months earlier. And had we done nothing then, she might not by this time even still been alive. So she was active again and hopeful.

Leslie was a quilter. After years of doing other handcrafts - crochet, needlepoint, counted-cross stitch, and even throwing clay pots with her friend Wendi - she took a quilting class a few years earlier and loved it. So every Wednesday, she would get together with her “friendship group” - three women she had known for years - to work on quilts. Wednesdays became almost sacrosanct - she would never schedule anything else on her quilting days. The four of them would get together to sew, go out to lunch, go for coffee and/or dessert, then return to whichever house they were at that day for more sewing. So after three months - almost to the day - she got together again with Jill, Kathi, and Carole for sewing. She stayed all day, was a bit tired when she got home in the late afternoon, but was fine. It seemed that her stamina, balance, language – everything – had already improved since finishing the radiation treatments, even though she was told it might take a month or two. And I think it meant so much to her to be able to get together with her friends, since she was not certain when this started that she would ever be able to do that again. She said her work was not nearly as good as it had been (she was a bit of a perfectionist, after all), and she said she was pretty slow. But she enjoyed it tremendously. So Wednesdays again became her day to be with her friends and work on her quilting projects. (And those days were also for me, because when she was with her friends, I had the day for myself and usually played golf. And that was important for her as well, as she was concerned that I was having to spend too much time looking after her!)

We returned to San Francisco in mid-August and she had her first MRI following the six weeks of radiation and chemotherapy treatments. The MRI was very good – showing that there was only a small amount of possible edema around the surgical cavity, perhaps some scar tissue (both from the surgery and from radiation), but no indication of new cell growth. Dr. Clarke was very pleased with what she saw, comparing the pre-surgery, post-surgery, and current MRI images - as well as what she
saw in Leslie and how she was doing. The tumor was apparently resected as completely as possible, caused very little damage, and the treatments so far had seemed to be successful at keeping new cell growth from occurring. So the Avastin was to be resumed in the next couple of weeks, followed by the daily Tarceva and a maintenance regimen of Temodar (just five days each month). The planned hiatus had been welcome. It was a bit daunting, however, to have MRIs so frequently, as it was a constant reminder that these tumors have a history of recurring - and often recurring quickly.

Saturday after Friday’s doctor appointment was a good and relaxing day. After breakfast we did the entire Crissy Field walk all the way to the Warming Hut for the first time since the radiation treatments began. Although we weren’t particularly fast, she did well. After lunch we got together with my former student Seraphina and her daughter Liliana at a park. They were still living in Moscow with Sera’s Russian-born husband but were on a west coast visit - mostly just to see Leslie! We all walked to a café for tea, a very hilly walk of a mile or so. I was a little worried that Leslie was over-doing it that day - but she clearly wanted to do it. We did more of the same on Sunday as we again did the five mile walk to the Warming Hut and back, had lunch, then went shopping at Stonestown. I think she was enjoying pushing herself after the six weeks of extreme fatigue while undergoing radiation. And she did very well on all of this - I was very proud of her. I think shopping (some new clothes from Chico’s) was her way of showing hope and that she was going to live and enjoy life and not let this get her down - and certainly wasn’t going to give in to it.

**After Three Months – the middle of August**

So where were we three months after the discovery of the tumor? Well … alive and functioning well was the obvious answer. And three months earlier that was not altogether certain. At the rate glioblastomas grow, three months is the typical *survival* time from when these tumors first present themselves if nothing is done. So in our case, the quick response by one of the world’s best neurosurgeons followed by the aggressive treatment protocol left her able to walk and talk and think and live a somewhat normal life and enjoy herself - a testament to the quality of her care and effectiveness of the treatments as well as the brain’s ability to recover from trauma. What we knew was that the tumor site was clean – with no regrowth of the tumor. There was probably some edema and scar tissue left – and that could be responsible for the changes in her abilities (thinking, memory, language – just her mental quickness) relative to before this thing intruded on our lives. But, although Leslie may not have been as mentally facile as she had been, she could read, write, carry on conversations, reason, plan, follow anything she heard or read, be physically active, and simply be who she had always been. She never showed despair or anger that she was having to go through all of this. She just accepted it, saying “It is what it is” or “These things happen to someone, why *not* to me?” And she never lost her sense of humor through it all. She did tire more quickly – an enduring consequence of the tumor itself and the massive radiative and chemical assault on her brain, I suspect. It was probably unrealistic to expect that there would not be any lasting effects of all of that.

Her quick dry wit had always been there. Once, I was taking a shower and said, “Oh, damn”, to which she asked from the adjoining bedroom what was wrong. “Oh, nothing really,” I said, “I just dropped the soap and a big chunk broke off. Now it will be odd for the rest of its life.” “Like father like son”, was her immediate response. A typical conversation with Leslie.

So where were we at that point? Just waiting. Waiting to see if her system responded naturally to restore her blood platelets to a normal level after the hiatus between the initial round of radiation and chemo treatments and the maintenance treatments to follow. She could not be put back on the three drugs until the risk of internal bleeding was abated. And even when the treatments began again, there would be the constant waiting to see if they were effective at keeping the tumor at bay.
But after three months, it was about as good as could have been hoped for. Physically, Leslie had handled the surgery, radiation, and chemo about as well as possible. Mentally and emotionally, it is difficult to see how she could have been better. Although she may have been frustrated that she had lost some of her capabilities -- and uncertain as to whether and to what level they would return, she understood and seemed to accept all of this with considerable grace. Her biggest concerns, other than the obvious, were that she tired easily and had lost some of her strength (which she was determined to regain through exercise) and that she had lost some language, mental quickness, and small motor skill abilities and we just didn’t know to what extent they would return over time.

So we were simply living with cancer.

There were issues, of course. She always had to go to the pathology lab for blood tests - checking on platelet counts, for example, and her white cell count which was a crucial test of her immune system. It could be catastrophic if that became compromised. Fatigue was still an issue even though her strength and stamina had improved immensely once she got past the radiation treatments. Her walks with me and with her friend Colleen had become longer and quicker paced as she got stronger. But busy days were tiring and she would often rest or nap some in the afternoons. But she was not going to avoid doing the things she wanted to do just because she might get tired from them. She always felt that the more she pushed herself, the better off she would ultimately be.

Leslie received a jury notice. She had always been very willing to serve when she was called, feeling it was her civic responsibility. But she was very concerned about it this time. She wasn’t sure if she would have the stamina should she be selected to serve on a long protracted trial. And although she felt she would be quite capable of following any trial proceedings, she worried that her language might fail her during any jury deliberation. She just did not feel she would be able to adequately fulfill her responsibility. So I took her jury summons to the courthouse - and was told that she would need a written request from her doctor to be temporarily excused from jury duty. Although I’m not certain the courthouse clerk actually understood Dr. Villa’s explanation - a malignant intracranial neoplasm centered on the left temporal lobe, the request for her to be excused from this jury summons was granted. And she never was notified that her jury service was being rescheduled.

We met with Dr. Filippi, her local neurologist, and he seemed very pleased with how everything had gone to that point. He was not surprised with the low platelet count, given the intensity of the chemo treatments she had for six weeks. Apparently the bone marrow stops producing platelets when subjected to chemo drugs and it takes a hiatus for the marrow to recover (a sign, he said, that the chemo is effectively stopping new cell growth) – and she had been on a much more intense regimen than is standard. In effect, he said that he would not need to see her again, but that she should call if there was anything he could do for her. We were so grateful that he had contacted Mitchel Berger at UCSF on our behalf as that set in motion the contact with the medical team at the Brain Tumor Research Center.

It was late August, nearly four months after her surgery, and Leslie was back to doing many of her “normal” things. She even went walking on her own one day, listening to an audiobook on her iPod - just as she used to do - and then went to Baywood Elementary to help her dear friend Wendi begin setting up her fifth-grade classroom for the coming school year. She was pretty sure it was not advisable to go help in the classroom when the kids were there, as she had done for many years. Even though there was no evidence that her immune system was suppressed, she just didn’t think it was wise to push her luck. But she loved Wendi - and loved working with her. So to help set up for school, and then to go in after class on Fridays and on Sunday afternoons to help with grading, recording grades, or anything else Wendi wanted her to do was something she really liked and it
helped her to know she could still make such a contribution. Our Saturdays were usually pretty active – Farmer’s Market in town, walking the Bob Jones Trail, going to Costco and the grocery store, and having lunch out were very much our old routine - and had become our new routine as well. All of that was another indication that she was very much herself again.

By the end of August, she was ready to be back on the full chemotherapy regimen - the biweekly infusions at UCSF as well as the other two chemo drugs - probably not looking forward to it exactly, but knowing it was necessary. She was doing great - but still had to be careful and monitor everything. That is, she tolerated the aggressive chemotherapies, but they were not without side effects. And she just accepted that as a necessary consequence of fighting the disease. And the trial protocol seemed to be working as she continued to get stronger and more capable with no indication of tumor progression. But as hopeful as we were, she would often point out that it was really too early to tell for sure since it had only been four months - and she said she was counting on being progression-free for at least a year. It was, after all, still just a clinical trial and we didn’t know if it would be effective against the tumor long term and extend the time she would be progression-free. All indications were that it was working. But we were both aware that there were no guarantees.

Hi Bill,

I know you are interested in the language aspect of all of this, and that has been very interesting. Leslie still stumbles over words, often just can't retrieve some word and has to work around it or fish for a way to say what she wants. Sometimes it is just a matter of mis-pronouncing something - sometimes substituting a word that she doesn't mean (but always a verb for a verb or a noun for a noun, which is interesting). She still mixes pronouns some - especially gender pronouns. And sometimes she will catch it and sometimes not. How much difficulty she has seems to me to be closely correlated with how tired she is. She seems to be able to read just fine - although she is not nearly as fast as she used to be. Her writing is also pretty good - emails, etc. - although some of the same word finding issues creep in there as well. And sometimes, especially if she is fairly tired, what she tries to write is a bit jumbled. She usually asks me to proofread anything she writes before she sends it out - and sometimes I need to suggest corrections. I'm sure there are still neural pathways that are just not functioning like they once did, and the brain is trying to compensate - it is, after all, still recovering from all of the assault it has had to deal with. Although I'm not sure she is convinced at her progress, she has come a long way. The local neurologist we have seen is amazed at how well she has done, given the nature and size of the tumor and where it was in brain, the extensive surgery required to remove it, then all the radiation and chemo treatments. So all in all, we have been fortunate - “except for the obvious”, as she would say. The next step in her treatment is to go back on the biweekly infusions and the two other drugs - “poisons,” in her words - all designed to attack the cell growth process in an attempt to keep the tumor at bay. She will continue to have periodic MRIs to check her progress. [An email to my brother, who was interested the language issues.]

And then, on occasion, there were reminders of the seriousness of this. On one of her Wednesdays with her quilting friends, with sewing in the morning, going out to lunch, and then back for more sewing in the afternoon, she may have had another minor seizure. Although there didn’t seem to be any other symptoms, she said her language was significantly impaired for an hour or more – like before, she just couldn’t retrieve words or would get stuck mid-sentence. She excused herself for a bit and got some water, but it didn’t help. She called me - I had just finished playing golf (my Wednesday activity when she was with her friends) - and it was very noticeable. She didn’t have any other problems and her speech gradually got better even as we talked, so we decided she was going to be okay. When she got home later in the afternoon (driven by one of her friends since she had stopped driving when this all started), she seemed to be fine. She had no signs of any confusion, could understand everything, followed any conversation or whatever was on television, etc., and her language was okay but still a bit hesitant. Was it a seizure - a result of some neural hyperactivity that affected the pathways used for retrieving words? I didn’t know. Was there something we should
have done about it? I wasn’t sure about that either. But if it happened more often or became more severe, I knew that I should definitely call her neurologist and the UCSF neuro-nurses (the “sisters” as she often referred to them). This kind of episode had only happened once or twice - but was concerning when it did, as we never knew whether it was the start of something new.

At the next UCSF appointment, Dr. Clarke did not seem to be concerned about it - and thought we had interpreted that episode correctly. They had always been surprised that she had not had more seizure activity given the incredible assault on her brain. And it was not surprising that it would affect her language, since the tumor, surgery, and radiation were all centered on her left temporal lobe - in the area between the Broca and Wernicke areas, the location of the neural pathways used for transmitting signals between those two areas related to language.

Since being back on her full chemotherapy regimen, she had been doing well. No nausea, but she did seem to tire more easily. She still walked in the mornings – and would spend the afternoons with friends, including going back to helping Wendi in the classroom on Friday afternoons and Sundays. But she said she felt more fatigue than during the hiatus from treatments. And that was not surprising. We saw Dr. Villa, her local medical oncologist, as part of a routine visit – and she was thrilled at how Leslie was doing. She said the fatigue was most likely due to Tarceva, since she had by then been back on the drug for a couple of weeks - and that was normal. Dr. Villa also pointed out that she had been through a lot the last few months and shouldn’t be surprised if she became tired easily! But she reiterated how well Leslie was doing - the scans showed no tumor and she expected the next ones would also be clean, and she had been hit with much more chemotherapy all at once than most ever receive and had been handling it well. She added that Leslie might become one of their first long-term GBM patients. (And I found that statement daunting! The long-term prognosis for a glioblastoma is not good - there are not many long-term GBM patients. I so hoped it was true.)

The new normal – Fall 2010

As we approached the end of September, Leslie felt good, was going on long walks (although she was probably not as fast or as strong going up hills as she’d like to be - or once was), got together with friends to go into town or out for lunch, etc. She still got pretty tired, though - and was sleeping ten or eleven hours each night. Although she sometimes mentioned how fatigued she was, it was all relative as she could do those five mile walks and still have the energy to go to town with me or a friend, then watch some TV after dinner all without taking a nap or even dozing off in her recliner. All of her doctors were amazed at how active and energetic she was and how much she could do.

So … life was getting back to normal - or at least to a new normal. Leslie was feeling good, being active, being social, quilting some in her studio in the afternoons or evenings, reading more and more, etc. And I was even back at the university teaching part time - being on campus three days a week, interacting with both my students and my colleagues, almost like old times. My department chair was very clear that should something change, all I would need to do was call and they would find a way to cover my classes - even on short notice. (And that was very reassuring - but I certainly hoped it would not be necessary.) My schedule even left me time for some golf - a little practice at the range on my way to campus and even a chance to play occasionally, since Leslie was doing so well on her own and I was not needed at home so much. We still needed to pay attention to schedules - when to go to the pathology lab, when to meet with various doctors, and - of course - the biweekly trips to San Francisco for infusions and meeting with Jenny Clarke or “the sisters” to continue monitoring her and to discuss any changes in medications that might be needed. But, as I said, we were enjoying those trips, and they were just a part of our normal routine.
So by the Fall, things seemed to be going well. Leslie tolerated the aggressive chemo treatments. And even though there were some side-effects - fatigue, very dry skin, being cold all the time, etc., there weren’t the severe side effects we had feared. Emotionally, I don’t think she could have been better. She was on a low-dose anti-anxiety med - since anxiety and depression are often huge issues with brain tumor patients, although I wasn’t even sure it was needed in her case. When Dr. Clarke once asked about her mood, Leslie responded that she felt great, then added, “But I am on Zoloft - so even he doesn’t make me angry anymore,” nodding in my direction. (Jenny responded that maybe she should try it.) So things were going well after all she had been through those four months or so.

We only needed to meet with Dr. Clarke on alternate visits. The infusion had become routine – we would go into the CRC later in the afternoon and meet with those nurses. And they had almost become our friends as well as they greeted Leslie with such joy and always wanted to catch up on what we had been doing since the last visit and what we planned to do on our weekend in the City. The infusions themselves took about an hour and a half. She was often very cold - and had to bundle up, and the nurses brought warmed blankets to her and water or sometimes a cup of tea. She occasionally napped, but we usually played Scrabble on her iPad. She almost always beat me (badly) and I was not the one with language deficits due to a brain tumor! She handled it all so well without concerns or even noticeable side effects. But the fact that we were there was still a reminder of how serious this was. Routine or not, we went to the Clinical Research Center for an infusion of an experimental drug not knowing whether it would be effective in keeping her brain tumor at bay.

After the treatments, we usually went by Jamie’s bar and just hung out with him - and that, too, became part of our routine. It was always interesting at the 540 Club. The patrons all knew us both by then - and always looked after Leslie, coming over to chat with her for a bit, offering to get her more tea or water. We often had a late dinner at one of “our” places on Steiner - Barneys for hamburgers or Amici’s Pizza or a wasabe rice bowl with salmon from Pacific Catch around the corner to take back to our room, and then watched TV in the motel. These trips - as serious as they were - had become our fun. Our Saturday and Sunday walks to the Warming Hut were part of it as well. Her stamina and strength continued to get better. Even her word-finding seemed to have improved.

Hi Bill - Leslie’s language abilities are continuing to improve, I think. My sense is that she is not stumbling over words as much as she was, although still has lapses where she can’t think of a word, or get the pronunciation right, or something. She has always been probably the best person I’ve known for understanding word meanings, spellings, grammatical subtleties, etc., but that is not her strength anymore. Will it be again? Not sure - I think she is doubtful. She has always been so numerate as well as literate. But tell her a phone number or something numerical now and she struggles to get it straight. Yet she recalls passwords, PIN numbers, etc., when she is doing online bill paying! Very strange. The brain is a very complicated organ, it seems. Neither short term nor long term memory seems to be any problem, although I’m not sure she would agree with me on that - she fairly often comments on how much she has lost (although those comments seem to be less frequent). I think it is just that the brain is still trying to form new pathways - and sometimes some link to stored information works less efficiently than other times. Where she is most likely to have language problems is when she is also doing something else - like when we are walking or doing some other task or she is getting tired. Although we would like to think we multitask - the brain is really a sequential processor not a parallel processor - and those processes and switching between them take more time now than they used to (and more energy - hence the fatigue!).
October and her 65th Birthday (and start of Medicare!)

When all of this started back in May, it was not altogether clear that Leslie would even reach her 65th birthday. So this, for me as well as for her, was a very big day! She walked in the morning with Colleen, got together with Wendi to help at school in the afternoon, and went to lunch with her quilting friends the following day. She had a very active Birthday Week … all the things she enjoyed doing. Her stitching work had improved a lot in the last month or two – much better small motor control when doing her appliqué work, for example. She loved to quilt - especially the very fine piecework that she did. I’m sure it bothered her (although she didn’t really comment much about it) that she had lost a lot of that small motor control following her surgery. So it was nice that she had gotten so much of it back and she was relishing the chance to work on her projects - both when she was with her sewing friends and in the afternoons in her studio and evenings in front of the television. Was her work as good as it was before all this started? I’m probably not the one to ask, as it looked great to me. Being a bit of a perfectionist, though, I’ll bet she could tell the difference!

The change to Medicare as her primary healthcare provider itself had been fairly transparent, but also had an interesting “side effect”. Her given name was Claire Leslie, but she had gone by Leslie since third grade. So all of her insurance and medical records were either under Leslie Brown, or a more formal C. Leslie Brown. But, apparently, the federal government doesn’t recognize first initials and middle names. So she officially became Claire L. Brown on her 65th birthday. And it took awhile to get all of her medical records, insurance, medications, and doctors offices to recognize that she was the same person - that it was just a name change.

Leslie was always very diligent about her personal care. She was scheduled for her regular semiannual visit to her dentist to have her teeth cleaned - and was very worried about it. She knew that since she was on chemo and there was always concern about her blood platelet count, she was not supposed to have any intrusive medical procedure that might cause bleeding - at least not without consulting with the UCSF people first. And she didn’t know if that included something as simple as having her teeth cleaned, but was sure anything more serious than that, a root-canal procedure or something, would cause some concern. After thinking about whether it was a good idea for a few days, she finally just asked me to stop by the dentist’s office and explain why she was cancelling her appointment. I think she simply realized that the long-term health of her teeth was probably not something she would ever need to worry about. And it never again came up for discussion.

By the end of October, it was already time for another MRI. She handled the MRI itself very well - even though they had to do it twice since the first time they did not include the gadolinium contrast agent! How could a state-of-the-art hospital make such a mistake since that was necessary to display any progression? By that time, having had so many MRIs, they weren’t frightening for her – she often slept while in the tube. But having had a panic attack during her first MRI, she still would take Ativan to relax. I’m not certain it was necessary for her by then. But since I was not the one having an MRI to check whether there was any new brain tumor activity, I had no objection to her doing whatever made it easier for her. The results of this scan, however, were not definitive – and that caused some concern. There was a small change in the image, which Dr. Clarke continued to think was a result of the radiation – either scar tissue or radiation damage or edema, but not tumor. But because there was a change, the radiologist felt it needed to be watched carefully so a shorter time to the next MRI was suggested. Because the news was not unambiguously good – that is, showing a clean image with no questions pending, it was disconcerting to us both. Hopefully, the next MRI would not show any change, which would then suggest an absence of new tumor activity – but the waiting for a more definitive result was frustrating and merely reminded us of what we were dealing with, and how rapidly these cancers grow. The next scan would be done in just six weeks.
Although it was a mistake on the part of Radiology not to check with Dr. Clarke whether or not to include the contrast agent during the MRI, there was a reason why they should be cautious. One of the blood tests they do is to check the serum creatinine level. That blood count is a measure of kidney function. And if it is elevated, that can indicate some stress on the kidneys - and there is some reluctance by the radiology people to do an enhanced MRI because the gadolinium contrast agent that is used needs to be expelled by the kidneys. But gadolinium is necessary for the MRI to show tumor progression, should there be any, because the gadolinium ions attach to hemoglobin in the blood and the atoms’ high magnetic moments enhance the images wherever there is a higher concentration of blood - as in tumor growth. Such are the complications of all of this.

Hi Bill,

I can't believe it has been two months since I've brought you up-to-date on how things are going here. That is good news, actually, since not a lot has changed. It has now been nearly six months since the first signs that anything was wrong - and well over five since the surgery. She has now been back on the full set of treatments for a couple of months. And the good news is that she is still tolerating it all very well - almost no side effects of any of it (other than perhaps more fatigue than she would normally have if drug-free). And that, I think, is amazing. She still walks 4-5 miles several times a week, gets together with friends, helps a teacher friend in the classroom after school once or twice a week, is feeling stronger, more balanced, etc., etc. All of that is a good sign.

The language issues have not changed a lot since the last time I wrote. Her oncologist thinks that the difficulties she now has may only improve a little as time goes on - that is, between the tumor, the surgery to remove it, and the radiation, there is likely to be some permanent damage. (I don't think Leslie liked hearing that - but accepts that it is what it is!) On the other hand, she is doing fine. She reads, albeit more slowly than she used to, communicates well - although sometimes a bit hesitantly - both in speech and in writing. She still misses words or has difficulty retrieving them, sometimes mis-spells them when writing, still mixes gender pronouns in normal conversations, etc. - but we can always figure out what she is saying and she follows every conversation without a problem. And, as I said, that may not change a lot over time.

Six months after the diagnosis

Even though we had some concern that the MRI was ambiguous, Leslie was feeling so good through October and into November that it was hard to imagine that there was a problem. Her stamina continued to improve. She was very active, went for long walks, went shopping, and worked with her friend Wendi on Fridays and essentially all day on Sundays when we weren’t traveling to San Francisco. Even her language seemed to be good most of the time - until she became very tired. There was some concern that she continued to slowly lose weight. But it seemed to just be related to how the chemotherapies she was on had affected her metabolism. She was still cold all the time “as if being cold from the inside out,” she would say - which meant she was probably burning more calories just to stay warm which made it difficult to keep her weight up.

The first week of November was another good and active week. Our San Francisco trip for treatment on Friday was then extended for a long weekend with Ruthie, her best friend from childhood. For years, they had met in the City in late October or early November for a girls-only weekend (and for celebrating their birthdays). But because Leslie hadn’t driven since her first symptoms (she didn’t want to be behind the wheel of the car if she had another episode of language blocking which might be due to a seizure), I drove her this year - but she wouldn’t allow me to even stay in the same hotel as she and Ruthie since it was their weekend together! I was just her ride. It was a busy weekend - and she did well. The progress she had made was really remarkable. It almost seemed as if there were no real concerns with all this - but we both knew that was not true.
After returning from San Francisco, we met with Dr. Villa. She was thrilled with how well it was going. Her interpretation of that last MRI was that what had been seen was definitely not tumor, but rather what is called “pseudo-progression” – a change in the MRI image that can be due to a combination of radiation damage and some edema or inflammation. She explained that those changes in the magnetic resonance images are common for months following the completion of radiation in glioblastoma patients even after complete resections of their tumors - and the changes are difficult to distinguish from tumor progression. And she was certain it did not indicate tumor growth because of the progress Leslie had made, the level of aggressive treatment she had been getting, and that she was asymptomatic. Deborah Villa was sure the next MRIs would be clean as well.

The entire month of November continued to be good. Leslie’s stamina had been good, her language continued to improve some, and she was very active and enjoying life. Her meeting with Dr. Clark also went well. Jenny was very pleased with her progress and general good health, stamina, language, balance, … everything. And she was not particularly concerned over her weight, which had continued to drop a bit, but did suggest that she continue monitoring it and perhaps even increase her calorie intake some if it continued to drop. It did not seem to be due to any lack of appetite, so must have been that her body was simply burning more calories than she was taking in - and this was not unusual for people on these aggressive chemotherapies.

I had occasionally been able to get away to the golf course still - and had even been playing pretty well, surprisingly. It was my way to mentally escape (most of the time) - and get some exercise and get together with friends at the course. I think it was as important for Leslie that I go play golf as it was for me - she knew that I enjoyed it and she did not want her illness to keep me from things I enjoyed any more than it had to. While catching up with a friend while at a local pro-am golf tournament, I told her what Leslie (whom she had not met) was going through. She sent me two LiveStrong wristbands - from the Living with Cancer Foundation. I was very touched by that - and wore one of the wristbands for several years. At the time, it reminded me not to take Leslie for granted - that even though she was doing so well and improving all the time and had been so independent again, this was not over and she needed me to be strong for her and vigilant. [And later, the wristband just reminded me of what she went through - as if I would ever forget.]

So Leslie had just been her usual active self. In short, she was living life and enjoying it. So six months after the start of this ordeal, she was doing well - and it was beginning to look like the clinical trial was being very successful at preventing new tumor growth. We saw Dr. Stella – her local radiologist – and he was very pleased with her progress and noticed in an instant her vitality, improvement in language and energy and general abilities. And he went out of his way to comment to me how great she was doing - something they always hope for in these cases, but seldom see.

Dear Seraphina,

Thanks so much for the call this morning. Leslie really enjoyed getting a chance to talk with you and to hear your news. As you could tell from your conversation with her, her language has improved tremendously. I know, she still stumbles occasionally or misses a word occasionally - but it is really remarkable, I think. And, as she said, she has been feeling very good these last several months. She has regained so much of her stamina, is able to exercise, get together with her friends, shops, helps her teacher friend at school - most all of the things she was able to do before. Are there issues still? Of course, but mostly fairly minor ones compared to what we thought might be the case. She has been able to tolerate her treatments so well - and her spirit and attitude through it all has been amazing. It seems the clinical trial protocol is working well.
December

The Thursday before another trip to San Francisco the first week in December was somewhat more stressful for Leslie than most days. Her blood pressure was somewhat elevated. My guess was that she was a bit anxious about the MRI that was scheduled and what it might show, since the previous scan had been somewhat ambiguous. It was a very long Friday with the drive to SF and all, but the MRI went well and showed no new tumor growth. There did not appear to be any change from the previous MRI – indicating those questionable areas were radiation effects and not tumor growth. And that was all very good news.

This research MRI was done on a 3 tesla magnetic resonance imaging machine (twice the normal magnetic field of a standard MRI) to obtain higher resolution images as well as adding two more tests to the procedure. In addition to the normal images both without and with the contrast enhancing gadolinium, they monitored blood profusion through the blood-brain barrier in order to detect whether there was any abnormal blood flow and obtained a spectroscopic mapping of brain chemistry. This MRS (for “magnetic resonance spectroscopy”) created a map showing relative levels of certain chemical markers which might suggest tumor growth. It would be useful if it could show activity before any significant changes in the anatomical images occur. It was called a “research” MRS rather than a “clinical” MRI because there have not yet been sufficient protocols established to make use of the MRS results to make real clinical judgments - it is just part of a study. The gadolinium agent used is to show image enhancement where there is increased blood density. That has the effect of making blood-rich areas of the brain much brighter in the images. In the original MRI images of the tumor before the surgery, for example, there was a very bright ring around the tumor - in all views of the tumor - indicating increased blood flow to that area, hence rapid tumor growth. The post-surgery images only show slight enhancement in certain areas, and all these periodic MRIs are an attempt to interpret the changes that occur.

The important bottom line was in the conclusion of the radiologist’s report: “no tumor progression” – telling us all was well. The questionable areas of the previous MRI were unchanged, indicating they were radiation damage or scar tissue and not tumor. The blood profusion test showed equal blood flow to both halves of the brain - indicating that no tumor growth was occurring, since the tumor was just on the left side. The small nodule of enhancement mentioned on the earlier MRI - and was of some slight concern worthy of watching, seemed stable and suggested that it was “probably not tumor related”. That was a huge relief. But radiologists’ reports always seem to include those qualifying words.

The holidays

We had never made a big deal of the holidays - and this year was no different. Thanksgiving week had been pretty normal - or what we now call normal. It was spent quietly at home and we certainly had a lot to be thankful for. And Christmas was not much different - a small tree in the living room and just a low key Christmas dinner just for the two of us. We had just been in San Francisco the weekend before - and would return during the week between Christmas and the New Year - seeing Jamie both times, so there was no need for anything special the weekend of Christmas itself. So Christmas day was nice and quiet - we never left the house, much the way we like holidays! It was so great to see how well Leslie was doing and how much she was enjoying life.
The just-before-New Year’s visit to UCSF also went well - with no indication of any problems to be addressed. Leslie felt great, was very responsive and conversant, and Dr. Clarke seemed to be thrilled with her progress. She spent some time interpreting the MRS images (and the radiologist’s report) more thoroughly than when we met with her right after the scan two weeks earlier, which I appreciated. She took the time to answer our questions about the tests, why they were done, and what the findings meant. Jenny Clarke just did not seem to be at all concerned by anything that was found in either the MRI or the spectroscopy study, which was consistent with my own interpretation of the images. The conclusion was that after seven months, Leslie was doing great – good stamina, good balance, good appetite, her language was good, her neuro exam was good, she was reading more and more, and she was being both physically and mentally active.

New Year’s Eve was also spent quietly at home, much like Christmas eve and Christmas.

Hi Jamie,

I know I’ve sent you the radiologist’s report from the last MRI. But here is a more extensive interpretation of it - based on what Jenny Clarke said in our meeting the other day. My sense is that this is all very good - even though the radiologist is a bit cautious in his conclusions (he has to be). But especially since your mom has been doing so well, I think this report is very encouraging.

So … Happy New Year (let’s hope it is better than this last one!)

Although left unsaid, I think neither Leslie nor had I expected that it would all be going this well by the end of the year. It was so good to see her respond to people’s questions about how she was doing with an enthusiastic, “Oh, I’m feeling great!” – and mean it. And most who saw her, I think, had assumed that she had beaten this disease – that the tumor had been removed, her treatments were successful, and she was cancer-free because of her obvious vitality. By all indications, it seemed that the surgery, the extensive radiation treatments, and the clinical trial through the UCSF Brain Tumor Research Center had been about as effective as they could hope to be. Leslie had been about as strong and active as one could even imagine - and she was simply living an active life again.

That said, we just didn’t know what 2011 would bring.
A NEW YEAR

The beginning of a new year can be very exciting. One thinks of all the possibilities and is full of hope. But this New Year’s Day was different - at least for me. Because even though all indications were that Leslie was doing spectacularly well, there is not a good history with these tumors. And while hopeful that this clinical trial would continue to hold the cancer at bay - and perhaps even be long-term successful at defeating it, one cannot know what will happen. And even if it were successful, we knew she would always be a cancer patient - and require constant monitoring.

As the new year began, life had continued on as it had been. That is to say, Leslie was feeling great and her doctors were thrilled with her progress. But her weight had continued to drop some. We were not sure why as she was eating consistently, and even making some effort to add to her diet. But she was still always cold – it was very difficult for her to stay warm enough, and that probably consumed a lot of her energy. She continued to walk several times a week and be active - so things were going well. But there were the continual reminders that her life was not exactly normal.

With the start of the new year, Leslie would see all her local doctors again - just to check in - in addition to the regular visits to the clinic and CRC at UCSF. There did not seem to be any problems – no indication of seizures, for example, and her mood had been uniformly good. But she was keenly aware of the seriousness of all of this – and the potential of a recurrence of the tumor as time went on and the fact that it would have to be dealt with if (but more likely when) it happened. But the progress had been remarkable. And her spirit through it all had been remarkable. Our San Francisco trips were always busy, but also fun. We would usually see Jamie – at least for awhile in his bar, shop some, go for walks along the Marina, and eat out at our favorite restaurants. And that was all good.

One evening in our motel in San Francisco, I looked into the costs of the drugs associated with her treatments. It was astonishing! I’m not sure anyone actually pays the published prices of the drugs - but just the three chemotherapies she was on at the time would have been about $20,000 a month, according to their websites. (I commented to Leslie that she certainly had a very expensive drug habit. “But not nearly as much fun,” she responded immediately.) The Avastin drip (which contains only about 2/3 cc of the drug in a saline solution) lists at about $4000 - making the drug itself about six million dollars per liter, which must make it one of the most expensive liquids on Earth. And those costs did not include the other meds she was on or the clinic and various hospital expenses. Were it not for the clinical trial, which covered most of it, and the coverage by Blue Cross and Medicare, it would have been very difficult for us to afford all of this. What do people do who do not have the access and insurance coverage that we had? (A rhetorical question, no need to answer.) Most of our expenses were just the trips to San Francisco every two weeks. But what do people do when they can’t even do that for whatever reason, or are themselves compromised in some way or fighting their own issues, or are not retired and able to devote their time to this fight?

Not much had changed through January. Leslie still walked a lot and felt the exercise was both invigorating and necessary to maintain a level of fitness and strength. We did a nice hike in the hills south of San Luis Obispo on a warm sunny January morning. It was beautiful and great fun doing the hills on narrow and uneven trails - and she handled it all well (something she would not have been able to do only a month or two earlier - another sign of her incredible progress). After the hike, we went to lunch and had a frozen yogurt in our downtown mall. A great day - and she wasn’t even particularly tired afterward!
Although she felt very good, I thought she was getting a bit nervous about the MRI that was coming up at month’s end. It was just a sign to me how aware she was that there are no known cures. And although we could hope this clinical trial would have long-term success, she certainly understood that the tumor could recur - and was even likely to at some point. I don’t think she was too concerned that the first few MRIs after her surgery would show progression. But she knew from our first conversation with Mitchel Berger that her tumor would not have been visible in an MRI only six months prior to its discovery - and that the more time passed, the higher the likelihood that the residual cancer cells would build resistance to the drugs and reassert themselves.

The end-of-January MRI went well - except for an issue with the injection port (the nurse blew the vein!). The MRI showed no significant changes or enhanced areas under contrast - a good sign that there was no new tumor growth. We would get the official radiologist report in a few days, but Dr. Clarke was pleased with how it looked and felt there was no indication of tumor progression, which would have caused some increased swelling and would have shown up in the enhanced images. The enhanced areas that were there, she thought, were just treatment related and not tumor.

The radiologist’s report, however, was not nearly so positive. There were small changes from the previous scan which the radiologist was able to see. Jenny Clarke called my cell phone first thing Monday morning to say that she did not feel that the report should be interpreted negatively (hoping to warn me before I even saw the report). She had not sensed that the changes were anything other than treatment effects - continuing effects of radiation. She had gone over the images with another (and “very trusted”) radiologist and they both felt that the first radiologist was being overly concerned about what was showing in the images. Jenny referred to her as “paranoid” - seeing things that were not there. It was disconcerting, but not unusual, it turns out. Brain MRIs are very difficult to interpret and there are a number of changes that can mimic tumor, including any inflammation or edema and even any necrosis. And pseudo-progression because of treatment related changes - especially the effects of radiation which can look like changes due to live tumor activity - have even led to surgeries in which no tumor was subsequently found. And these changes can continue for many months after the radiation treatments. Both Drs. Clarke and Villa, have referred to the effect (and I even found a 2006 paper in the literature by Clarke on the subject). Jenny Clarke was certain that was what the radiologist was seeing.

In early February, we met with David Filippi, Leslie’s local neurologist, for the first time since August. There really was no particular reason to go except as a scheduled routine followup. He was visibly pleased with how well she was doing – even commented on how much her speech and cognition had improved. As usual, he made some very odd comments: “You are still here!” as he walked in the room, as if surprised she was even alive, and “Have you made a bucket list yet?” which bothered Leslie a lot as it indicated he did not any expect long-term success. She replied emphatically, “I don’t have a bucket list because I don’t expect to die anytime soon.” He seemed to like that - and her spirit! His medical concern (and it’s his area of expertise) was whether she had any seizure activity - since that is so common with either brain trauma or surgery as well as with tumor progression. I think he was surprised that she had not, but was still cautious and wanted her to stay on her low-dose anti-seizure medications. Dr. Filippi felt very confident that if Jenny Clarke did not see tumor progression in the MRI, then she should be taken at her word (“She’s brilliant, trust her.”) – especially since Leslie was doing so well without any seizures or other tumor related symptoms.

The next day, we also met with Deborah Villa, our local oncologist. She had seen the radiologist’s report and agreed that it sounded frightening. But she did not perceive that it indicated anything other than treatment related changes – that is, she too felt that there was no tumor progression and Leslie was doing so very well and was completely asymptomatic. She was a bit
concerned that her weight continued to slowly drop – and encouraged her to simply add calories to her diet (Dr. Clarke had said the same at our last visit). Leslie found this a bit amusing. She had spent her entire adult life concerned about gaining weight - and now everyone was trying to add calories so that she would. Her comment was “I have to get a brain tumor so that I can finally eat anything I want!”

February was about the same as the previous several months. There hadn’t been any particular changes of significance. But her weight continued to drop some (maybe five pounds since the first of the year). She had still been eating well. She had even added snacks and desserts, gone out to lunch and dinners more (sometimes even having sweet potato fries and a milkshake or something!), etc., and still had not gained any of her weight back. She still looked healthy, but I think she would have liked to gain a few pounds just to stop the slide. Our trips to San Francisco for her infusions were uneventful. The treatments had been going well and she still wasn’t suffering from any particular side effects. We did our usual Crissy Field walk to the Warming Hut on a rare warm and sunny late-February Saturday - with great views of the San Francisco Bay and the Golden Gate Bridge and the Palace of Fine Arts - and that was really nice. Her stamina was good so we also went shopping after lunch, out to dinner, and then back to Jamie’s bar. Maybe partly because of the nice warm weather we had been having, she wasn’t even as frightfully cold for several weeks so she didn’t need to bundle up so much. All of this indicated to me how well she was doing.

But the warmth, of course, was only temporary and was replaced by cold rain the last week of February! But she still felt good, was active and going places, was continuing to eat well and her weight had finally stabilized. I think it had been a bit of a worry for her when her weight was continuing to drop - so to have it stay the same for awhile reassured her some I think. But after turning cold and rainy again at the end of the month, she again had such a hard time staying warm.

March, 2011 - Ten months after her first symptoms

For the first time in a long time, Leslie had a day that was pretty difficult. She said she didn’t feel well when she first got up and she was pretty lethargic. We did go for a late morning walk. But she was cold the entire time, and did not seem to have much energy (stopping to rest a couple of times and was a bit off her usual pace). She was having more word-finding problems than usual as well – and even expressed concern about whether “something was happening”. (My sense was she was stumbling with words in the morning as well – before we went out – and was working very hard on the walk.) After returning home, she rested for awhile, had lunch, and seemed to be much better, but she wasn’t very active the rest of the day. It had been over ten months since that first indication that something was wrong – and over nine months since her surgery. I didn’t think the problems she had were seizure related but rather a result of just not feeling well and being pretty tired, but I didn’t know. But she had been having having more word-finding problems – and more mixing of pronouns recently. So some seizure activity could have been possible and that would be a concern. It was difficult to keep in mind sometimes, when she was doing so well generally, that there were some serious issues here and we needed to pay close attention to how things were going all the time.

For me, the ten month point was a bit of a milestone. In my reading about glioblastomas, ten months to a year seemed to be about the median survival time for adults even when they have had the standard-of-care treatment including a complete resection, radiotherapy, and chemo. The fact that she had been doing so well without any indication of tumor progression spoke to the success of the clinical trial and her own commitment to staying healthy and active. That said, what I suspected was just a minor set-back that day was still alarming. Because we had to always wonder if it was the first sign of a change for the worse.
By mid-March, the weather had improved some and was a bit warmer (although with the usual March winds), and Leslie was not so cold all the time. She did still tire quickly, especially after her walks. It seemed to me her language had been better than during the previous week – at least certainly not any worse. Her word-finding, use of pronouns, etc., had all been better.

The language issues were interesting - because there could be such a big difference depending on how tired she was. My guess was that as she would get tired, her brain focused on just normal motor control functions and less on the signal processing required for word retrieval, etc. Since the tumor, surgery, and radiation were all in the area of the neural pathways between the parts of the brain used for language, those neural pathways were compromised and her language suffered first when tired.

Leslie still felt pretty good all through March – although would fairly often comment on being tired. Her weight had begun dropping again - another couple of pounds - after being fairly stable for awhile. She was trying to add calories to her diet and hadn’t been walking quite as much – partly because of the very windy weather and partly because she was trying to get the balance right between calories in and calories out. I think her “target” was to get closer to where she was at the beginning of the year - regaining the five pounds that she had lost over the previous three months.

By the end of March, it had been eleven full months since that first seizure – and we had no idea at that time what she was facing. I knew she was a bit apprehensive about the upcoming MRI as she was aware that these tumors often recur within a year. And she was also concerned about her additional weight loss - even though she was trying to eat a bit more and hadn’t exercised as much, and she had been tired more of the time and was having more language difficulties when tired. So I think she feared that the MRI would show signs of tumor progression - and she said at one point that she just didn’t know how she would respond if it did.

So that week was a bit more stressful for her. She did go out with her quilting friends on Wednesday - her regular sewing day - and it seemed like a really good day for her. It was also nice that she was not nearly so cold all the time – even during an early Spring storm with several days of rain and lowish temperatures. But I was concerned that she seemed unable to gain weight and that she had been tired more of the time and even had some nausea - not debilitating in any way, just uncomfortable for her and concerning partly because it was a new thing.

The regular Thursday blood test prior to having her MRI showed a low platelet count, a little below what they would need for the next Temodar cycle and the scheduled infusion. So she would need to hold off on the next cycle until the platelet count came back up. I wasn’t sure why that happened, but was told by the neuro-nurses that it was “not a big deal”. The effect is a condition known as myelosuppression - a suppression of the bone marrow’s ability to produce blood cells - and that could affect her immune system. I wasn’t sure whether she was pleased that she would have little hiatus from the chemotherapy or if it worried her that doing so would allow the cancer to advance. But she wouldn’t be drug-free for very long - just until her counts came back up a bit.

We made our trip to San Francisco for the weekend - with the MRI scheduled for Monday morning at the end of March. Leslie was pretty nervous about it – not the MRI itself, but what it could show. She was still essentially asymptomatic which would seem to indicate an absence of cancer progression. But she was also well aware that there was a difference of opinion among the experts after the MRI of two months earlier as to whether the hyperintensity seen on the enhanced images was treatment or tumor related. And she also knew that tumor progression was a distinct possibility - in fact, common for the standard treatment protocol. So we would have to see from the MRI if the additional trial drugs had continued to be effective.
The MRI itself went very well, as did the visit with Dr. Clarke. She was pleased with the scan images and felt that the changes she was seeing in the “relatively stable” images were still radiation effects and not new cancer activity. She said that the changes had been gradual and not a more aggressive, intrusive change. She felt that new cancer growth would have resulted in more changes in the surrounding brain matter and would have “lit up” more in the gadolinium enhanced images. So her initial conclusion was that the observed changes in the images were treatment related and not new tumor. However, Jenny later said she had talked with the radiologist who also examined the images. The radiologist felt that one area near one side of the surgical cavity showed some enhancement which could be tumor related. Dr. Clarke reiterated that there is often ambiguity in the images and that she still felt the changes they were seeing were due to treatment and the radiologist was just being particularly cautious about what he was seeing in the images - and that is better than ignoring what might be a concern. The next MRI would be done in just a month.

Dear Stephanie,

We just got back from another SF trip and another MRI - so it was a bit trying. (I know Leslie gets pretty anxious about the MRIs - although masks her anxieties pretty well!) We haven't seen the official report yet (I will get both the very technical radiologist's report as well as her neuro-oncologist's interpretation) - but have actually gone over the images with her doc and we see her local medical oncologist this week. There are still changes in the images from two months ago (and nearly eleven months after the surgery now!). Her neuro-oncologist is sure these changes are still just radiation effects - which apparently can continue for a year or two. But the radiologist still thinks there is something there that needs to be watched carefully - and wants another MRI in only a month. So all we can do is wait - and that was a little disconcerting for her to hear. She is, however, still doing well. There are so many side issues - like being cold all the time and she has continued to lose weight and has been making a conscious effort to stop the downward trend. (Like many women, she has struggled with her weight her entire adult life - and it is so odd to see her add milkshakes, desserts, snacks, etc. to her otherwise very sane diet, just to add calories!) Her appetite has been good through all of this, but I'm sure both the surgery and the incredible amount of meds she has been on has played havoc with her metabolism as well as her thermostat. So, anyway, we just continue on and she is handling it well. I'm glad her quilting friends are coming over tomorrow - it will take her mind off it (and I'm out of the house - having been neither invited nor welcome!).

By the end of that week, her weight had dropped a bit yet again. She was not sure she would even be able to eat more than she had been! She hadn't been walking much for two weeks, had been eating a lot – and still losing weight. And I think she was worrying about what that meant. She even occasionally wondered aloud if the cancer was coming back, although I didn’t think there were any real signs of that. But she would say things like “I can’t imagine a world without me in it.”, or “You will probably want to remarry after I’m gone.”, etc. – even though I didn’t think she truly believed that the cancer was returning. But she certainly knew that it could and was even likely to eventually.

The weight loss was probably just due to Tarceva (it’s listed as one of the many possible side effects), according to Dr. Villa. It was certainly not due to loss of appetite or nausea or lack of interest in eating. It was probably due to either the original tumor and/or the targeted treatments that had changed the body’s metabolism requiring an increase in protein and calories. As chief cook - although what I do in the kitchen is particularly simple, I had been trying to add more of both.
Early April started off well. Leslie was feeling much better and seemed to have much more stamina - and her blood counts were back up as well. We had gone for some walks again and she felt like getting out more. She was just much more robust and upbeat than in the previous couple of weeks and said she was sure that the next MRI was just a precaution – and that there was very little chance the cancer had returned so soon, so there shouldn’t be anything to worry about. It was great to see her spirits rise so - after what seemed to be a low point only a couple of weeks previously. She was back walking with Colleen again as well, had gotten together with her friends, and was also quilting - both on Wednesdays with her quilt group and for a couple of hours in the afternoons in her studio. Her weight had even finally come up a bit!

Our trip to San Francisco went well – she just met with Emelia, one of the neuro-nurses, to get a new schedule for the Temodar cycle since her platelet count was back up and she could resume the chemo treatments. Emelia explained that her next MRI had been moved up a day to Thursday on our next scheduled visit, since the Tumor Board met on Thursdays and Dr. Clarke wanted the MRI to already have been done in case they needed to see the images. Leslie responded, “and I find that a bit daunting.” Emelia laughed and commented that she had such a way with words. I think Leslie appreciated her comment, given the language issues she had! But Leslie’s comment also showed that she definitely understood that if the Tumor Board needed to see the scan images, it would be because of the suspicion of tumor progression. And that is a bit daunting. We just took it easy the rest of the weekend. Saturday was beautiful in San Francisco – and we did the Crissy Field walk which was nice, then watched the Masters golf tournament after we got back home on Sunday.

Mid-April continued to be good. Resuming the Temodar did not seem to cause any problems. She felt good and had been walking a lot again – both with Colleen and with me when Colleen wasn’t available. We did a five mile trek into the hills at Montano de Oro over the weekend which was fun - and she seemed to handle the hills and uneven terrain just fine. Her stamina and balance were both good - indications to me that all was well. I knew she was a little nervous about the upcoming MRI the following Thursday – but it did not seem to be getting in the way of things she wanted to do or dominating her thoughts. She slept well, ate well, had gained back a little more of her lost weight, and was in very good spirits. And she said again that she was sure the MRI was just a precaution since she couldn’t imagine that the tumor was coming back at this stage.

So that was a good week - and Leslie had been very active (some shopping, house cleaning, washing clothes, walking, and quilting in addition to getting together with her friends). She hosted her quilting group on Tuesday, rather than the usual Wednesday, so that we could make the trip to San Francisco on her regular quilting day. By Tuesday evening she was pretty tired, though – and she was having some increased word-finding difficulty (and was beginning to worry that it was not a good sign). I thought it was just due to her having had such a busy day with her friends - trying to keep up and contribute to their constant chatter. She was a little agitated over some of the exchanges with her friends – and she worried a little about whether she might have said something to offend someone or been impatient over something. (She had always worried about such things.) I thought all of that was just due to anxiety about the upcoming MRI, even if she didn’t think so. But she did not sleep well Tuesday night - possibly in anticipation of the MRI, although she said in the morning that she didn’t think it was worrying her.
Leslie’s language was pretty hesitant on Wednesday’s drive to San Francisco and she was finding it frustrating. I think she was worrying more than she admitted and was concerned that this was the first sign of recurrence of the tumor or maybe some minor seizure activity with that being the cause. It did not act like seizure in my opinion – I still thought it was just anxiety. Her language was better later in the day when we got to the City and she recognized that it was as well and commented on it.

Her MRI was first thing Thursday morning – nearly the anniversary of that first episode when her language was blocked. The MRI itself went smoothly. But I knew she was anxious about the results - that she was afraid the images would show new tumor growth. We were whiling away the time at the Stonestown Mall, mostly just browsing, and waiting for our afternoon appointment with Dr. Clarke when Leslie would say things like, “This may be the last day I can be happy,” and then later in the car as we were driving back to the Medical Center, “I am so scared.” (I tried to reassure her and reminded her that the MRI was just a precaution - that it was very unlikely the tumor was coming back. But I wasn’t sure whether that helped.) On the other hand, her language was much better than it had been the previous day or two. And even her blood pressure was normal – certainly no indication of great anxiety. And we would know more when we met with Dr. Clarke.

A year into this would seem premature for tumor progression given how well she had been doing under the aggressive clinical trial protocol. But since the median survival time from glioblastomas is only about 10-12 months under the standard-of-care protocol, there was always that possibility. The question here was whether the addition of nine months of the aggressive Tarceva and Avastin treatments as part of the clinical trial would stave off tumor progression – or perhaps even prevent it.

The MRI images were again “mostly stable”, according to Jennifer Clarke – that is, there had not been much change from the previous MRI. That said, there were still two areas that they were watching very closely to see if the changes in density in the images were due to treatment effects or new tumor activity. Dr. Clarke still felt it was consistent with treatment – the effect of the 42 days of radiation on the brain, although she said there was a small chance that what they were seeing was tumor. She did say, however, that she would have expected a more rapid change since the previous MRI had it been due to tumor and that the images with the contrast agent would have been enhanced more. Her opinion was also reinforced by the lack of symptoms and with continual general improvement in language, awareness, stamina, balance, etc.

Jenny Clarke’s report stated that Leslie “continues to do fairly well although she does have mild stable expressive aphasia” (her continued difficulty in word-finding). “In general, she is a well-appearing woman with a KPS of 90. Systemic examination, as well as a detailed neurologic examination, is notable only for stable mild word-finding difficulty with intact repetition and comprehension.” [The Karnofsky Performance Status is on a scale from 0 to 100 - with 90 indicating that one is able to carry on normal activity with only minor symptoms of disease.] But Leslie was bummed to find out her KPS was only 90 - she wanted a perfect score, of course! The report did note that there were areas of the MRI that were ambiguous - and that part of Dr. Clarke’s conclusion that it was not tumor related was simply based on how well Leslie was doing in all other respects.

However, the radiologist’s report cited “masslike FLAIR hyperintensities in two different areas on either side of the resection cavity” although it seemed to me to be difficult to see much difference between this scan and the previous one when I looked at the images. The radiologist’s interpretation of the findings was that there may have been some disease progression since the previous scan and that he had discussed those findings with Dr. Clarke (a few days after we met with her). They wanted to schedule another MRI the first week of June.
The week after we returned from San Francisco went well. We made a side trip to Sacramento to see Leslie’s brother and family and returned home on Monday. So it was a long weekend. But Leslie still handled it all just fine. She walked Tuesday with Colleen and quilted with her friends on Wednesday till late in the afternoon and Thursday we were in town all day till late. She was pretty tired on Friday. Although she felt well, she wasn’t very active. When she was tired, it still showed in her language - more difficulties than normal. But Saturday was then a good day - we went for a long walk in the morning and she was talkative without any particular difficulties. She was a little tired when we got back home, but then we went to town for lunch and shopping. So it was all very good.

So at the end of April, she was active and busy. And she went to the annual Seven Sisters Quilt Show on Saturday (which she had missed the previous year when all of this started), saw friends, and was just enjoying herself. Her weight had even gotten back a little closer to where she wanted it to be and then held pretty steady, which was also a good sign. She didn’t seem to be worried at all.

May 2011 – One year after diagnosis

The first week of May marked the first anniversary of the seizure that sent Leslie to the hospital emergency room – which then led to the discovery of the tumor. After the surgery and all the treatments she had undergone, she was doing amazingly well. But it was still not clear whether she was progression-free since the MRIs had been inconclusive. But she felt so good and had been so active, it was hard to believe that there would be progression which surely would have increased her symptoms. And her doctors continued to think what they were seeing were treatment effects because of how well she was doing.

The infusion on that Friday went well – it was now just routine and Leslie was handling it with no debilitating side effects. That said, there were effects of all of this – the tumor itself, the surgery to remove it, the six weeks of radiation, and ten months of aggressive chemotherapy. She still struggled sometimes with word-finding, she claimed more short-term memory loss (although I wasn’t sure I saw any evidence of that), and “multi-tasking” was certainly more difficult for her – the mental processes had been slowed some and switching from one thought to another or trying to do two things at once seemed much less efficient for her. (We don’t actually multi-task anyway, but merely switch quickly from one task to another. The brain cannot process two different signals over the same channel - visual, aural, motor function, etc.) Her language certainly suffered when she was trying to talk while doing something else, for example. And she had to concentrate more on each thing she was doing. And she tired more easily, probably a result of the increased strain on the mental processes to do normal functions. But she did not seem to have any signs of deterioration and, if anything, was continuing to improve in all aspects - strength, balance, mental acuity, reasoning, and for the most part even language. So it seemed to me (and to her doctors as well) that she was asymptomatic. Even her weight had stabilized, having increased some over its lowest value.

I don’t think, given what we learned about her condition one year earlier, that I ever thought she would be this facile again (in fact, it wasn’t certain she would still be alive). So as far as I was concerned, the treatments had been an enormous success given the circumstances. That said, there was still a lot to worry about as we did not yet know whether there was tumor progression in spite of the aggressive treatments and how well she was doing.

Following a great day on Saturday, including a trip to Santa Cruz followed by an evening back at the 540 Club, her lower legs and ankles were very swollen - much more than I had ever seen them! This could be one of the side effects of Temodar, which she had resumed on Friday, or of Norvasc (taken for hypertension) or worse, from compromised kidney function. Had her legs still been
swollen the next day, I would have called the clinic before continuing with the Temodar. But the swelling had gone down by Sunday morning. I was glad she was to see her cardiologist on Monday.

Leslie always liked listening to her favorite San Francisco radio station at night on her little Sony radio. When she awoke on that Sunday morning, she said that she had just heard on the news that some famous golfer had just died of a brain tumor. “Was his tumor the same as mine?”, she asked. Although I hadn’t yet heard the news, I knew that Seve Ballesteros had been battling this for a couple of years. I said I wasn’t sure, but had heard that his tumor was both large and in an area that couldn’t be completely resected as hers had been. “But even so there are still cancer cells left,” she said. “That may be true, but that is also why you are having these aggressive treatments, to prevent those cells from developing into tumor,” I responded, trying to reassure her. I always wanted to answer her questions honestly - but I also wanted to protect her from too much worry. We had breakfast, went for a walk, then packed the car and made the long drive home without mentioning it again.

She had a good night (as usual) on Sunday. And there was again no sign of swelling on Monday – so whatever happened over the weekend was an anomaly. It was a good consultation meeting with Michael Famularo (her local cardiologist), who had been her doctor monitoring kidney function and hypertension for years. He didn’t see any reason to be concerned about any of her lab tests, and reiterated that she was doing great. He told her she should just continue doing what she had been doing to fight the cancer and that he didn’t think he needed to see her again for a year. Leslie adored Dr. Famularo - always had. As we were leaving his office, he gave her a big hug. She appreciated it, but was surprised as he had never done that before in all the time she had been seeing him. She wondered aloud after we left his office if that was his way of saying goodbye - saying that he probably doubted whether she would still be around for her appointment the following year.

That week in early May had been very busy. Between the doctor visits, walking with Colleen in the morning and then shopping with her in the afternoon, sewing with her quilting group, etc., she had been pretty tired in the evenings. I didn’t know if her being tired was a symptom or was just from having been so busy. She stayed home on Friday and did very little (but was glad to have the house to herself as she had sent me out to play golf saying, “Don’t you have somewhere to go?”). I think she was still tired and was enjoying the quiet. She was in her studio sewing when I got home.

Her appointment with Deborah Villa in mid-May went very well. Leslie always liked meeting with her as she was always so encouraging and enthusiastic. Deborah had not seen the radiologist’s report, but had seen Dr. Clarke’s assessment (as well as Dr. Stella’s, our local radio-oncologist who had administered her radiation treatments the previous year). It was also her opinion that the effects they were seeing were treatment effects and not tumor progression. She pointed out that radiologist’s only have the images to look at, whereas clinicians are also assessing how the patient is doing, what the treatment protocol had been, whether there was any indication of symptoms, or any changes in the physical and neurologic exams, etc. She reiterated that Leslie was doing so well and showed no symptoms of disease, so in her opinion, we were not seeing tumor progression.

So, a year after all this began, Leslie was doing spectacularly well. In that year, she had undergone major surgery, six weeks of radiotherapy, and the three concurrent chemotherapies of the clinical trial. She had completed nine monthly cycles of Temodar along with the Tarceva and Avastin following the surgery and radiation treatments. The clinical trial called for ten to twelve cycles before a hiatus - so she was nearly through that phase of the study. She had tolerated the aggressive treatments and had regained much of her language abilities (reading and writing although still had some difficulty in word-finding). She was essentially asymptomatic after that year with no neurologic issues. That said, there were still changes in her MRIs that were concerning. There was a fair
amount of stable enhancement around the surgical cavity which could be interpreted as due to the radiation treatments. But there were also two areas that the radiologist said could indicate disease progression. Both Drs. Villa and Clarke had said that symptoms arising from tumor progression would probably involve some neurologic effects—balance issues, seizure activity, rapid increase in language problems (given the location on her left temporal lobe), etc. But none had occurred. And Leslie’s spirit had remained so good through all of this—even when things were much more difficult in the early months following the surgery. She had handled it all so well with both courage and grace—and I don’t think either one of us thought that she would be doing that well a year later.

Hi Bill,

Leslie still feels very good even though she is still on all of her treatments. She gets together with friends, goes for long walks, etc. - and we are still going to SF every other week for her infusions (which have no effect on how she feels). Her periodic MRIs have continued to show some changes—and that is a bit concerning. Her neuro-oncologist still thinks these changes are just treatment effects. But the radiologist uses phrases like "possible evidence of disease progression" in describing the images. So all we can do is wait - and hope the next MRI doesn't show anything more dramatic. It has now been a year since all of this began - and she is still completely asymptomatic. A year ago, I never would have guessed that she could be doing as well as she is today. She has seen her local doctors recently, and they have all commented on how well she is doing - and that unless something comes up, she should just continue with her treatments and check in periodically.

It all has been interesting from so many perspectives (or would be if it were not so serious and involved a real person that we love). What is possible medically is amazing. I have become somewhat able to read MRI images of the brain (I have downloaded the software that lets me see the images - and have spent some time reading about how to interpret them). The physics I understand reasonably well - but the clinical interpretation is what is difficult.

From a language perspective, she has continued to improve. She still has occasional word-retrieval problems - or just can't say something the way she would like to, so has to do a verbal work-around. (She recently said, "It is like having tunnel vision, but with language. I know what I want to say, but the words are off to the side and I can't quite make them out." Her neuro-oncologist liked that description so much she asked if she could make use of it!) But she is reading more and more now (although not the book-a-week of previous years) - mostly on her iPad (which is a great device for her), texts or emails her friends (although claims she is very slow at it), and gets together with her friends and I'm sure pretty much holds her own. So she is doing well.

We met with one of the other neuro-oncologists, Dr. Nicholas Butowski, in mid-May as Jenny Clarke was on vacation. I asked about the references to “increased masslike FLAIR hyperintensities” in the radiologist’s report from the MRI of a month earlier. He looked at the report then pulled up the images and examined the previous two MRIs carefully along with the report. In his opinion, the statement that the image changes indicated disease progression was unwarranted. He did not see any “mass effects” which would indicate tumor growth. He said that such changes would encroach on the normal brain matter and into the ventricles and surgical cavity—and the images did not show any of that. If those changes were disease related, he thought there would be more change in the successive images. He also looked at the diffusion images (often examined in diagnosing stroke patients) which he felt would show enhancement under contrast due to blood flow to any cancer growth, and did not see any indication of that either. He was very reassuring that the images were predominantly stable with the only changes still being due to the normal radiation effects that can continue to occur for a long time. The FLAIR enhancements, in his opinion, did not even indicate impairment of brain function. He said the problem with clinical interpretations of the magnetic resonance images is that the radiologists do not see the patient, or know the history, treatments, etc. They only see the images and sometimes attribute any changes to disease progression. This was very reassuring.
Before we left his office, Nick Butowski asked Leslie if she had any questions for him. Her response was, “Only the Big One.” He laughed and reassured her she was doing fine and shouldn’t worry. She liked Dr. B a lot. The next MRI was in just two weeks. We were not worried about it.

June 2011

It was June already – very hard to believe how quickly time was going by. Leslie was to have another MRI at the end of the week, only six weeks since her previous one. There had been ambiguity about the earlier scans - the radiologist had felt there was a possible indication of tumor progression, but both of the neuro-oncologists who had also examined those images did not feel it was more than continued changes from the radiation treatments she had the previous summer. Although they acknowledged the continued need to monitor it carefully. So a shortened interval between scans was called for, but none of her doctors expected a problem. What we were counting on was that the scan images would not have changed and would show more clearly that these were normal effects from radiation and not disease related indicating tumor progression.

The first week in June was a very good week – as Leslie was very active and was feeling good. She was upbeat and did not seem to be having any problems at all. Leslie walked with Colleen, went to town, quilted with her friends, even went out with friends on Thursday evening – to dinner and an amateur production of “Bye-Bye Birdie” and didn’t come home till 11 o’clock. She did not even seem particularly tired after such a long day. Then we got up first thing Friday and headed north for her eighth MRI since her surgery. We talked the whole time on the drive to San Francisco.

By then, MRIs had become pretty routine. But Leslie was still uneasy about being so confined in the “tube” - mostly since she had a panic attack during her first MRI over a year earlier when all of this first started, so she still took some Ativan to calm her nerves. And she had recently been pretty anxious about what the images might show, as well. But she felt so good, and was asymptomatic, so did not really expect they would show anything concerning. She always wore metal-free clothing for the MRIs - no zippers, metal buttons, or anything so that she wouldn’t have to change into a gown to be in the high magnetic fields of the imaging machine. But this time, they were insisting that she put on a gown. And she found that somewhat annoying, since they weren’t giving her any credit for knowing what she needed to do in preparation for the scan. So she pointed out to the young radiologist who came out to speak with her that none of her clothing had any metal. He still said she should change because “bras often have underwires or metal clasps.” Leslie replied, “Well, mine does not - but you are welcome to check if you want.” He declined - and she went into the imaging room fully dressed.

Leslie did not seem to be the least bit anxious about this. We simply weren’t worried about what it might show.
Tumor progression!!

After the MRI, we went to Dr. Clarke’s office and got the news – and what a shock that was! We both knew from the look on Jenny’s face as she walked into the room that this was not good.

The latest images gave a clear indication of tumor progression! What had seemed like treatment effects in the previous two scans (although the radiologists thought disease progression was a possibility) more clearly showed a larger involvement, some encroachment into the surgical cavity (which had not been seen before) and some active spots within the areas that we all thought were just due to radiation. Dr. Clarke could not be absolutely positive, but was almost certain that these were an indication of tumor growth. So much so that stopping the clinical trial and starting to consider other treatment options would be necessary. These tumors develop their own resistance to the drugs that are designed to prevent their progression. So once progression is indicated, whatever the current chemotherapy protocol is has to change as those drugs then have only limited effect in inhibiting any further tumor growth.

Although very much a surprise to us all - Dr. Clarke included, Leslie (who may have anticipated this result) just accepted this news and was very engaged in the discussion that followed on what the next step would be. I’m not sure I was as clear-headed. I was stunned - and my mind was reeling as I had been certain that the images would at worst be inconclusive and more scans would be ordered for a later date. But these images were clear: There were visible changes showing intrusion into the surgical cavity - and that was almost certainly tumor. Following that discussion, as we were leaving the office, Leslie turned to nurse Emelia, whose own eyes had filled with tears, and gave her a big hug - I think to comfort her more than to be comforted.

From Dr. Clarke’s report:

IMAGING: MRI from today, June 3, 2011, was compared with her prior from April 21, 2011, and the one before that from March 28, 2011. Unfortunately, the two areas of FLAIR abnormality medial and anterior to the surgical cavity have continued to increase in size and are now looking more mass-like and impinging on the cavity. There is also now patchy enhancement within the two lesions, and continued mild reduced diffusion as well. Overall this does look quite concerning for tumor progression at this point. In summary, this is a 65-year-old woman with a glioblastoma that now appears to be recurring. We will take her off study for tumor progression as of today.

So what was the next step? There were several options. Dr. Clarke felt that the best choice would be to “go back in” (that is, another surgery, which is not uncommon) to verify that what they were seeing was tumor – and then remove as much of it as possible. That should be followed by a different chemotherapy protocol – also part of a clinical trial, but for recurrent glioblastomas. Leslie would actually start taking the new drug prior to the surgery. We had a week or two to consider the option. Dr. Clarke would discuss the surgery with Dr. Berger and the Tumor Board. The new trial involved a new drug which had not yet been FDA approved for cancer treatment, but which indicated in laboratory tests that it inhibited one of the pathways necessary for GBM tumor growth. The trial would also include surgically removing new cancer cell growth and then going on the study drug for as long as it was tolerated and seemed to be effective. There were other possible treatment options that should be talked about with Dr. Villa. But none of this left us feeling very optimistic.
However disconcerting this was, we both felt that it was still just another step in the process. The first trial had given her more than a year before a clear indication of tumor progression (an extension of four to six months over the standard protocol). And she was otherwise healthy, feeling very good, and symptom-free. So starting here and removing as much of the new cell growth as possible and then attacking with a new drug designed to shrink the remaining tumor and interfere with its regrowth made sense and, we hoped, could be an effective protocol.

We had been hoping, of course, that the aggressive Avastin, Tarceva, Temodar combination of drugs would be sufficient to suppress any cancer cells that remained after the surgery and radiotherapy – and that she could continue with that regimen since she was tolerating it all so well. We knew that progression was always possible - even likely - at some point, but did not expect this. Now we had to think about a new approach - including more surgery - without any promise that it would be successful in the long term or even that any new treatment would even be well tolerated. That said, and although very bummed by the prospect, there was still some hope. The first step gave us a year in which she did well. We hoped that the second step would yield another year of good general health and active life, and, of course, hopefully even more.

It was a very rough weekend emotionally. After many simply great weeks - months even - when Leslie was doing so well in every respect, our hopes had been high. Then we learned of the recurring tumor and that her treatment protocol would have to change as she was no longer progression-free. I hated to see Leslie have to go through another surgery - it had been so difficult for her a year earlier. But she had recovered well and had a very active year of living and enjoying life. And since Leslie was so healthy and uncompromised otherwise (“Except for this,” she would say pointing to the scar over her left temporal lobe, “there is absolutely nothing wrong with me.”), she should do well going through it all again … we both hoped. The other worry, of course, was that the next clinical trial drug might not be tolerated or could be ineffective against the tumor. But we also knew the alternative, and it was not good - so she would very likely decide to proceed with the new trial.

From the literature on glioblastomas:

Glioblastoma Multiforme (GBM) is among the most devastating cancers, with a median survival of approximately 1 year. GBM presents unique challenges to therapy due to its location, aggressive biological behavior and diffuse infiltrative growth. Despite the development of new surgical and radiation techniques and the use of multiple antineoplastic drugs, a cure for malignant gliomas remains elusive. The scarce efficacy of current treatments reflects the resistance of glioblastoma cells to cytotoxic agents in vitro. Moreover, the short interval for tumor recurrence in glioblastoma patients suggests that tumorigenic cells are able to overtake the treatments without major damage to the cells.

That week in mid-June had seemed a little strange – she was off all of the chemo drugs and that changed the daily routines, including trips to the pathology lab to monitor blood chemistry and even simply keeping track of the various pills she needed to take. She had not been abandoned by her “team” – but it almost seemed like it since we did not have a treatment schedule or even specific appointments, and it was a little unnerving for us both, I think. Her life (indeed our lives) had become about fighting this disease - and we were doing nothing, it almost seemed. She had still been feeling quite good, however, and was taking it all pretty well. She did seem to have some increased language issues, but I wasn’t sure if that was just stress or if it was actually disease related. But she said she had been stumbling over words more frequently. And I had noticed that as well.
We met with Dr. Villa, her local oncologist, and she was stunned with the results of the MRI. But she also felt that it was a good idea to go in and sample the tissue to see if it actually was tumor or perhaps something else (breakdown of some of the blood-brain barrier, for example). Her feeling was that the complete resection the previous year and the regimen Leslie had been on should have kept the cancer at bay for two years or more. So she felt another surgery was a good option. She also liked the idea of the new clinical trial – especially since it would begin before the surgery and tissue samples could be examined to see if the new drug was being taken up by any cancer cells and having an effect on them. Coincidentally, while meeting with Dr. Villa in her office, Jenny Clarke called my cell phone! So the four of us were able to discuss together the proposed treatment plan, surgery schedule, etc. Deborah Villa also mentioned that if what they were seeing was not tumor, then to return to the previous drugs would still be a possibility even if they were not part of a study since they would still be considered effective against recurrence.

The proposed plan was to begin the new trial drug (code-named XL147) in a week. Then two weeks later, Leslie would go into surgery with Dr. Berger to remove as much of the new tumor growth as possible (since the MRI indicated intrusion into the surgical cavity) – and to analyze those cells. The surgery would probably be a sub-total resection in order to avoid doing any further damage to healthy brain tissue. It would also be another awake craniotomy as before to allow Berger to better define the margins of the resection area. After that, she would be on the new drug for as long as it was effective. That last statement just reminded us that no treatment would be effective forever.

Dear Seraphina,

Just thought I should write and say hi and let you know what has been going on around here. Leslie is still doing great - in every respect except one … but that's a big one! The latest MRI indicated tumor progression! Hearing that was quite a shock - to us as well as her doctors - because she has been doing so well and is asymptomatic.

As we've probably said, the last two or three MRIs had been ambiguous. Although the radiologist had indicated that the changes they were seeing in the scans were consistent with new cell growth, two UCSF neuro-oncologists and her local oncologist did not feel the changes were other than treatment effects. But last week's scans showed more rapid changes which gave a clearer indication of tumor growth. It is not as if it were totally unexpected - at some point - because these tumors become resistant to the drugs that are designed to prevent their growth, which is what makes them so insidious. We just didn't expect this yet. She has been completely asymptomatic for so long now, we thought this combination of the aggressive chemotherapies was working well to keep it at bay. (In fact, they had been, I think it's safe to say, because it has been well over a year now since her surgery - considerably longer than the norm for being progression-free - and she is still doing so well.)

So it looks like the next step is to start a new trial drug (she has already been taken off the three she was on), then go in for another surgery to resect as much of the new tumor growth as they can. The surgery will again be done by Mitchell Berger, the UCSF director of neurosurgery - probably on July 5.

She is handling all of this amazingly well! She still feels good and is doing all the things she has been doing this past year. Of course, she would rather not have to go through it all - and was hoping it would be another year or so before having to think about this. But she is willing to do whatever her team thinks is necessary - and both the UCSF and local docs think this is the right approach.

The next week started off okay. There was a plan - and Leslie seemed comfortable with it, although not looking forward to going through it all again. She felt good, worked on quilts in the afternoon in her studio, had walked with Colleen and gone into town to shop, and would quilt with her friends on Wednesday before heading to San Francisco. She did seem to be having more language problems – and it was frustrating for her. I thought, maybe for the first time, that she did not feel it was realistic to expect a good outcome long term. Although a small hope remained that
what showed on the MRI were treatment effects, I think she felt that there was tumor progression and it was again affecting her language. She was having more difficulty in writing emails as well as just carrying on conversations. I wasn’t sure how much of it was tumor related and how much was anxiety, some fatigue, and just an overall concern with where this could be heading.

**Starting Over – One Year Later     Mid-June 2011**

If this felt like *deja vu* all over again, it was understandable. It was not going to be an emergency surgery this time, but it needed to be done as soon as it could to avoid as much tumor progression as possible. But it wasn’t quite as urgent as it had been fourteen months earlier as it was not a large, aggressive tumor at that point. She would be on the new trial drug for two weeks prior to the surgery. That allowed time for the drug to hopefully begin acting on any new tumor growth - to be sure that it was being taken up by the cancer cells and to see what effect the study drug would likely have. (It might not have any *clinical* value, but could have some research value as part of the study.)

**Questions for Dr. Clarke:**

I had emailed Jenny some questions - and we discussed them one-by-one in our meeting on Friday before starting the new trial.

1. If there has been tumor progression, does that mean the tumor has become resistant to the Avastin, Tarceva, and Temodar drugs? My understanding is that there is a lot of evidence that GBMs develop resistance to the various chemotherapies designed to defeat them. Is that likely what has happened in this case?

   That’s correct – if what we are seeing is tumor progression, then it appears the drugs are no longer effective. Although it can vary a lot, the median progression-free period after a complete resection, radiation, and chemo is about six months. She has had nearly a year – so this drug combination seems to have been effective.

2. Should the surgery determine that what is appearing on the MRIs is *not* tumor but some other effect – treatment, breakdown of the blood-brain barrier or something, that is, pseudo-progression, could she then go back on the original drugs – even if not part of the clinical trial?

   If what we are seeing is not tumor, then there is no reason not to go back on the other treatment protocol since she has handled those drugs so well – and it could be that she would just go back on that study. I would have liked for her to be able to stay on for at least twelve cycles of Temodar rather than the nine or ten she completed [meaning five days of Temodar each month].

3. XL drugs have been taken in combination with Temodar and Tarceva in other cases reported in the literature, is that not indicated in this case because those drugs have already been used and yet there has been progression?

   Correct, if the tumor has progressed, there probably is no reason to continue those drugs – even if they are still marginally effective.

4. For the XL drugs to be effective, they need to have been absorbed by the tumor and affected the particular pathway necessary for tumor growth. If it has not been absorbed or had a biological impact on the tumor cells, will the trial still be continued or will some other approach be taken?
The sampling of tissue after initiating the new study drug is useful for the long-term study, but is not effective real-time in determining whether the new drug is effective against the tumor. So that does not help us make any decisions in the short run for any given patient.

5. This is only one of the abnormal pathways involved in GBM growth. Does that mean the tumor is likely to grow even with this treatment unless this is the only pathway involved in this particular tumor?

There are many different potential pathways involved in tumor growth, but they all seem to converge in the sense that it appears that blocking one of those pathways seems to affect the others in laboratory tests. So we feel this particular pathway could show some promise.

6. I assume that the recommendation to go with this trial is based on what has the best chance to work in her case. Is it based on the potential for success in her case? Or does the decision just depend on what clinical trials are available at this time?

The recommendation is a logical progression of treatment for a recurrent tumor especially in patients who have already been on the three drugs we have tried.

7. Will the surgery be as extensive as the first one? Your report refers to the likelihood of a “subtotal resection” – does that mean that only some of the tumor is accessible without doing further damage to working brain or does it mean that the trial can proceed even without a “total resection”? Will it again be an awake craniotomy? (I don’t think she is looking forward to that, exactly – but has said she certainly willing to do whatever is necessary to give her the best chance of success.)

I don’t know whether the surgery will be as extensive as the first one or not – that will be up to Dr. Berger. The trial itself does not require anything more than sampling the tumor tissue. But Dr. Berger will try to resect as much of the tumor as possible without doing more damage to good brain tissue. He will want to do the awake craniotomy again so that he can do the language mapping necessary to better define the margins of the effected area.

8. What do you see as a realistic prognosis at this point? Could this give her another year or more of reasonable quality of life (similar to this last year)? I know that is difficult to answer because each case is different and this is an early trial without much history. But do you have a guess?

That is always a difficult question, because everyone responds differently. It is always disappointing to see progression after being on what seemed to be a successful treatment protocol. So the odds are lower now, I suppose, than they were before seeing tumor progression. But I have also had patients after a second surgery go two or three years progression free.

After that meeting with Jenny Clarke, Leslie went to the CRC lab where she had an EKG, blood tests, and the first dosage of the new XL147 drug - a small pill that looked like a yellow Aleve, to be taken daily (with a price tag of $1400 per 200 mg tablet, according to the manufacturer’s website!). She then was to be monitored for six hours - with periodic blood tests and another EKG. (That all concerned me a bit just because I wasn’t sure what they anticipated could happen during that time.) So the next step had begun. She was watched closely to see if there were any adverse side effects. And our hope was that the new drug would do what it was designed to do – attack the particular gene responsible for building the tumor’s resistance to chemotherapies and inhibit its ability to thrive.
That Friday evening in our hotel was the first time Leslie really questioned whether she could do this. The previous year had been so difficult in many ways – and it had taken half of the year following the surgery to really regain much of what she had lost. And it was beginning again. Leslie questioned whether it was worth going through the surgery, the recovery, the new drug and the possible side effects, the trips to San Francisco, and the uncertainty of what would be lost in surgery this time – and then the uncertainty every month or two about whether an MRI would show that there was even more tumor progression. She began to think that this could not be successful in the long run – and questioned aloud whether she had the inner strength to go through it all. In my view, she was one of the strongest people I knew for what she had already done - which I told her (but didn’t know if it helped). I understood her fears and only hoped she realized how much we all wanted her to continue her fight - and be successful with it. On the other hand, I told her I would definitely support her if her decision were to discontinue treatment - and I think we were all aware of what the outcome would then be. By the next morning, she sounded very committed to the new trial and the surgery. She knew it would be hard – but, as I said, she was one of the strongest people I knew.

So Leslie had begun the new trial drug which had been effective in laboratory tests at inhibiting the genetic pathways these cancer cells use to proliferate. The hope was that with both a second surgery to remove as much new cell growth as possible and the new chemistry, further tumor progression could be held at bay. What we did know was that without the heroic efforts done so far, she would not have survived more than a few months after the initial discovery of the tumor. Yet, even with all they know, they do not know what causes these gliomas, how they form, how they become so malignant and what specific gene abnormalities make the tumors so drug resistant - as they essentially develop their own mechanisms for survival and proliferation, almost like an alien being living inside normal tissue! (There is even a considerable amount of literature on tumor survival mechanisms - referring to survival of the tumor, not the patient.)

It was a good week following the start of the new drug. Leslie felt great with no apparent side effects from the new chemo. She wasn’t even cold anymore – not like she had been for most of a year. She went on walks both Sunday and Monday – and they felt good. Her appetite was good. Her weight was still stable after some increase over the previous few months. So all was going well. That said, she was having more language difficulties. She was more hesitant, couldn’t find the words she wanted, was having a hard time reading aloud - she knew what she was reading, but had a hard time saying the words. And she was having difficulty emailing her friends and had me do the typing as she told me what to write. I know that frightened her (and me as well) because she suspected the tumor was affecting those neural pathways. But, amazingly, she remained in very good spirits.

Hi Bill

Leslie is still doing well - mostly, but it is all getting started again. She is now on a new chemo drug (replacing the three that she had been on) and she is tolerating it very well - so far, no side effects at all. She goes in for surgery on July 5 to remove whatever new cell growth has occurred. There actually have been more indications that her language is affected (mostly word-finding, but also spelling when she tries to write emails or shopping lists) - another indication that the tumor is encroaching on her left temporal lobe. In the last couple of weeks, it has become much more noticeable and she stumbles over words more of the time now. She’s not exactly looking forward to the surgery, the recovery, the struggle to regain what she has lost, etc. - but is going at it knowing that this is her best shot. She is already planning things she wants to do and to work on after the surgery.

I have learned more about this process than I ever wanted to know. Just as they did last time, she will go in a few days before the surgery for both an MRI - to get a 3D anatomical image of the brain - and what is called a magnetoencephalogram, which yields a functional mapping of the brain. They essentially monitor involuntary brain impulses while giving her various stimuli - verbal, visual, aural, and tactile - to see what parts of the brain fire when stimulated. That mapping will accompany the
anatomical images from the MRI to help the neurosurgeon locate what regions of the brain can’t be encroached on during surgery. It gets worse ... during surgery, they will bring her back awake and ask her questions while the surgeon is giving tiny electrical impulses through probes to the area surrounding the tumor, blocking her language in order to better define the surgical boundaries and to minimize neurologic damage! It’s called language mapping. And yes - it does sound scary. This surgeon is apparently one of the developers of this technique. We met with one of his colleagues on Friday, and he referred to him as the person he would want to operate on him should it ever be necessary - very precise with a very delicate touch, was his description. So, apparently they do know what they are doing. (Our local radiologist referred to him as being world famous.)

What still amazes me in all of this is how she has handled it all - both physically, with very little reaction to the chemo drugs, and emotionally to the stress of all that she has gone through (and is about to go through) and the uncertainty of it all. And all that with her spirit and sense of humor intact! I think she is aware that this is very likely not curable - but she feels that for many reasons, she wants to keep doing what is possible to do, especially since she still feels good and is able to continue to live her life. And participating in the clinical trials could potentially contribute to understanding how to fight this disease in others.

We met with Dr. Butowski again in the clinic upon returning to SF on Wednesday – and he did the usual neuro exams. We asked him whether the incidents of more severe language difficulty were possible seizures. He did not think so, saying those incidents are due to neural pathways being temporarily blocked rather than being hyperactive as with seizures. He specifically asked if there were other manifestations – like facial tingling or twitches, etc. (and there had not been). He said that he expected this surgery to be less extensive than the first one, probably with less swelling and shorter recovery time. Leslie welcomed that comment from him and counted on it being true.

Thursday was a gorgeous day – we did the usual Crissy Field walk, went out to dinner, went to Jamie’s bar, and generally had a good time. On Friday, Leslie went through the pre-op consult – going over medical history in detail, then the MEG used for magnetic source imaging, and met with the neuro-psychologist (again with David Perry, who remembered her from the previous year) to go over the language mapping procedures that would be used during surgery. The MEG yielded information about what neurons fired involuntarily when she was subjected to various stimuli as well as when the brain sends motor control signals, processing information, and creating verbal responses. All of this was to assist Dr. Berger during the awake portion of the surgery when trying to locate the margins of the affected areas of the brain – all in order to minimize neural damage.

So ... after a busy weekend of preparation for her second major brain surgery first thing the following morning, she spent three hours Sunday night in Jamie’s bar - shooting pool no less - and again having a great with Jamie and me and the others whom she by then knew and who knew her. Watching her that night, no one would have ever guessed what she was facing. Incredible!
The Second Surgery and the new Clinical Trial

We got to the hospital first thing on July 5 – and Leslie did not even seem to be particularly anxious. She had even slept well the night before! She certainly seemed more relaxed about this than either Jamie or I did. She just seemed to be in good spirits - ready to get on with this next phase. But we were kept sitting in the waiting room for most of an hour before finally being called.

At one point while waiting she asked for the time, then announced, “I’m about to lose my enthusiasm for this!” And that completely broke the tension for both Jamie and me! Who but Leslie, with her wonderfully dry sense of humor, would say something like that given that she was about to be taken in for her second major brain surgery!

When finally called in, we all met and talked with her surgical team in pre-op - and Leslie was quite conversant with them, although I’m sure she was nervous. I know I certainly was. I think they all - Drs. Mitchel Berger, Michael Prados, and Jenny Clarke - appreciated her spirit under the circumstances. They then took her into surgery a little after 8 am and by noon, they were closing – and all had gone well. This 3 1/2 hour procedure was much less extensive than her first surgery. And Dr. Berger was very pleased with how it had gone. He met with Jamie and me right away just outside the operating room and said that he was able to clean out the area very well, including some necrosis as well as new tumor growth, and that he could “protect what needed to be protected”. They apparently had difficulty with the language mapping portion of the procedure – either a result of her having some reaction to the anesthetic or possibly some seizing during the craniotomy, according to Dr. Perry - and it kept her from being very involved in the language mapping. But Dr. Berger said he felt he was able to successfully use the language map from the previous year and felt that it was still very helpful. In addition, he said the tumor itself had much less structure than he had expected - it was “mushier”, his word - possibly a result of the new XL147 drug, which could indicate that it was being taken up by the tumor. He said Leslie was likely to have some language difficulties for awhile because of swelling, but that should improve over time.

Her recovery was much quicker than the previous year although she seemed pretty confused while still in the neuro-ICU and had a lot of aphasia – difficulty finding words, identifying objects, etc. The doctors thought that was pretty normal at that point. (And it was still much better than immediately after the first surgery.) She was very hungry by the afternoon and ate well at dinner with help (some fairly dreadful looking pasta) just six hours after the surgery!

After a restless first night, she seemed a bit better in the morning. She again ate well (hospital oatmeal). But she was still very sleepy and fairly agitated. After a late morning MRI, she was moved out of the NICU to a private room in the neurosurgical recovery wing by early afternoon. But she was very lethargic and was nearly non-communicative - having a very hard time saying anything. She again seemed confused, and was not sure where she was. She slept for awhile in her new room, then got up once and walked slowly around the 8th floor with help (just exploring), then went back to bed and slept very soundly. In fact, she was so soundly asleep that she could not be awakened to take her meds in the late afternoon. The on-call doctors were called to be sure she was okay. She could only be aroused for a couple of minutes at a time and was completely non-communicative. I was pretty frightened by this. Dr. Berger’s chief resident came in response to a call from the floor nurse, but did not seem too alarmed by it. He did say he would go over the MRI with Dr. Berger to be sure the post-surgical images did not show something concerning. David Perry came as well and thought this could possibly have been a result of a seizure which then caused her brain to relax (something I had suspected), and said that it was not that unusual following brain surgery. Her blood pressure was
very elevated all day. I was worried about all of this - it seemed like a big set-back to me after she initially seemed to be recovering so quickly from the surgery. I was concerned that she was having seizures and that it was possible there was some brain damage from the surgery itself - or the seizures would have some lasting effect. She seemed to be slightly better in the evening, but I still worried.

Leslie apparently slept soundly Wednesday night and was still asleep when I arrived at the hospital mid-morning Thursday. I was pretty apprehensive as to what I would find when she finally awoke given what it was like that previous day. But what an unbelievable difference! She was very groggy at first and said she couldn’t remember where she was, what day it was, when she had the surgery, etc., and was even very concerned about that, “Why can’t I remember anything?” (But she was able to tell me that - already an improvement over the day before.) I was concerned that she was going to be much more compromised. But then over the next half hour or so, as she became more alert, she just came alive, had a good breakfast, then started talking about things she recalled from the surgery and wanted to go over everything that had happened, even comparing it all to what had happened the previous year! She said she remembered not being able to talk or help at all during the awake portion of the surgery – and even said she was able to recognize the pictures, but just couldn’t say the words for them during that part of the procedure. And she was very worried that she hadn’t been any help at all to Dr. Berger and hoped that didn’t compromise what he was able to do in the surgery. I tried to reassure her that Dr. Berger had said it had gone very well and that he was able to use the previous year’s language mapping. She remembered it all, it seemed, even though both Drs. Berger and Perry had said during preparation for surgery that she was unlikely to remember anything from the awake portion of the procedure. They just didn’t know Leslie very well!

So that was a really good day - no sign of the difficulty she had the day before. She was active, communicative, and aware of everything. She spent time in the morning with a physical therapist - including walking the corridors of the hospital again and was very balanced. She could do essentially everything on her own - only two days after surgery. Her language was still somewhat compromised, especially when she got tired - and that was probably due to the swelling from the surgery, and was expected and should improve over time - but her comprehension certainly was not compromised. (I'm sure it must have been frustrating for her, though, not to be able to say what she was thinking.)

Both Jenny Clarke and Mitchel Berger came to see her Thursday afternoon and were very pleased with how she had progressed. She was even quite conversant with them - and her sense of humor came through as well, which they both enjoyed. They said it looked like she could go home on Friday if she wanted - or certainly by Saturday. Major brain surgery and she was ready to be discharged in three days! None of them were even suggesting the acute rehab center she had gone to the previous year after the surgery (and which we thought was mostly a waste of time and money). She would probably get some outpatient help with language when we returned home. So, whether she left the hospital Friday or Saturday would probably just depend on how she felt. We would probably stay in San Francisco at our hotel until Sunday anyway before heading back to give her a little more time to regain some strength before the long drive. She was having some problems with her right-side peripheral vision - and was even having some colors, patterns, and even odd images popping into her field of view. “Please tell me you don’t have a pigeon on your shoulder,” she said to me at one point as I sat next to her hospital bed. (Apparently it is a common neurologic phenomenon when the brain does not receive a full field of visual information - it just substitutes images to fill the void, according to Dr. Clarke). If this was just due to post-surgical swelling, it would likely resolve itself. It was concerning, however, if it didn’t go away as that could suggest that damage was done during the surgery (which might mean some tumor growth was resected in that area of the brain).
So it seemed like this step in the process had been very successful. She just needed to fully recover from the surgery, get stronger, and begin living life again. Then the hope would be that the new trial drug - which she would probably resume in a couple of weeks - worked on the cancer to inhibit progression. So we would still be making frequent trips to UCSF to meet with the docs, have the requisite MRIs (with all the uncertainty associated with that), etc., but at least she would not need the biweekly infusions. She had been tolerating the new study drug extremely well for the two weeks before the surgery - with essentially no apparent side effects. So we expected that she would continue to do well with it.

It was hard to believe how much progress Leslie had made in how short a time. She worked with both physical and speech therapists on Friday morning, walked the corridors of the hospital, and was able to handle all the tasks easily. She was then discharged shortly after lunch – barely seventy-two hours after the surgery. She was pretty tired when we got back to our hotel room that afternoon, but was doing okay. I think she was pretty pleased with herself given how quickly she was recovering.

Leslie was anxious to get back home. So we decided to just drive home on Saturday morning and not stay the weekend – and she was fine. She was talking for most of the five-hour drive, did not even nap in the car or even seem especially tired after getting home! Her language was remarkably good (although it broke down a little about bedtime – I was only surprised it hadn’t much earlier). It was hard to believe that it had only been four days since she underwent major brain surgery and we were already home! When we pulled up in front of our house and climbed out of our SUV, our across-the-street neighbor Wendy came over, gave Leslie a huge hug and called her a “Rock Star”. I certainly thought so as well. A very appropriate comment and very appreciated!

The first week home was a very good week. She was certainly more tired than she had been, but was also very active. She dictated some emails which I then typed into her iPad – and I had a hard time keeping up with her. And that had been a huge change over just a few days (and miles ahead of the previous year!). On Wednesday, she spent the day with Colleen – shopping, lunch, etc., and was tired, but not exhausted when she got home late in the afternoon. She did have a bit of a rough day on Friday. She walked with Colleen, but was very tired after and was having a lot of word finding problems. But she just rested for a couple of hours and seemed fine by later in the afternoon. (There is always the possibility of seizures following brain surgery - although we didn’t know if that is what happened this time. But if there had been any seizure activity, it would most likely have occurred in the area around the surgical cavity and the brain would then just relax for awhile after any such neural hyperactivity. And that could cause the language deficit she sometimes experienced.) But it is absolutely remarkable to me that she could be so active in the first week after her surgery! Her UCSF hospital case worker had made a referral to a local home health service for outpatient care. So by the time we got home, they were already setting up a schedule to assess her status and what they could do for her. We were very impressed with what was being offered as well as with both the physical and speech therapists that would be working with her. I felt it would be a great help for her.

We returned to San Francisco the following weekend for a followup appointment with Jenny Clarke on Tuesday. The trip was nice – Leslie felt good, was upbeat, and we talked most of the way. She still stumbled over words some – and reading aloud from either her iPhone email or from her iPad was a real struggle (in a moving car no less!), which should not have been a surprise. (That said, it was a long time after the first surgery – not just a week and a half – before she could read at all.) We got to San Francisco in time to just relax a bit then go to dinner along Steiner near our hotel.
Then we wrote some emails together to her friends that evening. It was still hard for her to do that when she was tired, but she was willing to work at it after an already long day.

Sunday was a great day. Leslie’s brother Tony and his wife Carole drove over from Sacramento and we all walked to Judy’s, one of our favorite breakfast and lunch places on Chestnut. Leslie was as alive and animated as I had seen her in a long time – laughing and talking only twelve days after surgery. Her language was actually quite good. It was there that I took two of my favorite pictures of her - showing her amazing spirit. She was upbeat, funny, engaged and full of life. No one seeing her that day could have guessed that what she had just been through - or what she was still facing - was so serious and life-threatening. She knew at that point that the long-term prognosis was not good. She knew that the need for the second surgery was because her best hope at attacking the tumor had only been successful for a year and that the new clinical trial had no track-record of success at all yet, that it was after all, just a trial to see if it could impede the progression of the tumor. And yet there she was entertaining us all with her amazing wit - in every sense of the word.

Later in the afternoon, Leslie wanted to go downtown and browse some in San Francisco’s Westfield Center Mall. Not a good idea as it turned out. It was crowded and noisy and I think a bit overwhelming for her - and she tired very quickly. As she said afterward, “We won’t do that again.” After getting back to the hotel, she slept most of the evening and all night after a very long and active day - but a very good day indeed. It was hard to remember sometimes that it was less than two weeks since her surgery - and we should probably be a little more careful. But she liked pushing herself.

Monday was good as well. We were early to UCSF for blood tests followed by an MRI. Then after lunch, we went to the Stonestown mall for awhile, some mid-afternoon shopping for nothing in particular – then to Jamie’s bar late in the afternoon. We ordered pizza for dinner and just enjoyed the bar crowd, Jamie, and the 9-ball pool league competition going on there till nearly 10 pm. I was surprised at how lively she remained through it all – she did not seem tired at all.

We met with Dr. Clarke on Tuesday for Leslie’s first post-op exam. Jenny was thrilled with how well she was doing – how she looked, her language, her balance and neuro functions, everything – so soon after the surgery. “It’s what we always hope for, but aren’t willing to promise. Much better than expected at this point.” She went over the last couple of MRIs with us and pointed out several things. The tumor had clearly progressed, intruding into the surgical cavity during the month before the surgery (when she was off the trial drugs). But Dr. Berger was able to clean that whole area out very well. “There may be some areas at the margins that are still active, and they will need to be watched carefully,” she said. But there did not appear to be any new activity in the two weeks following the surgery – and that was a good sign since she was not on any chemotherapy. So she was cleared to resume the new trial drug, which we hoped would attack the cancer and prevent its regrowth. The new schedule would include returning every two weeks for assessment and periodic MRIs. According to Jenny’s report, Leslie was “well-appearing with a KPS of 90” - able to carry on normal activity with only minor symptoms of disease. And that was pretty amazing to me (of course, Leslie still thought it should be higher than 90!). All in all, it seemed to me like all of this was the most positive news possible. The surgery was very successful, Leslie had recovered quickly, appeared to be tumor-free, was functioning well, and was gaining her strength back very quickly. She had already spent two weeks on the new drug before the surgery with no side effects at all and could now resume taking it. We were very hopeful at that point, although we also understood the uncertainties.
Dear Stephanie,

Thank you for your note - it meant so much to me. It is hard for me to believe how quickly Leslie has recovered from this. She was only in the hospital three days (and was already walking the corridors by then!) - surgery on Tuesday and discharged about noon on Friday, and back in SLO on Saturday (talking the entire way home!). I know, she does tire more easily and can’t really push herself just yet, but she is doing so well.

We were back in SF this week, she had yet another MRI and met with Dr. Clarke. She was thrilled at how well Leslie has recovered (in just two weeks), essentially the same as before the surgery in every respect. The MRI looked good and she was cleared to go back on the trial drug after the two week hiatus for the surgery. I don’t think it could have gone any better. (Her doc said that they always hope recoveries will be like this, but never really expect it.) We will continue with the frequent trips to SF - the protocol for the trial requires assessment by either the trial doctor or the clinical research nurses every two weeks. But as long as she is feeling as well as she does, we don’t mind the trips.

July 24, 2011 - Our 43rd anniversary

Our 43rd anniversary was wonderful - for both of us, I think. But it was also a bit bittersweet, since even though we were hopeful given how quickly she recovered and how well she was doing, we both were aware it could be our last one together. We went to Cambria for a nice lunch at Robin’s, one of our favorite restaurants in the village - something we had not done for a long time. Then we spent the afternoon just browsing the shops. Leslie was energetic and thoroughly enjoyed the outing on a beautiful day - walking around the village, looking at everything, and having tea and a frozen yogurt before heading home on the gorgeous drive back down the coast. Great fun!

That was the start of a great week in fact. Leslie felt so good and was making so much progress (although probably still not as quickly as she had hoped, I suspect). Her language was pretty good when she was rested, but still fell apart some when she was tired. And she was getting pretty tired most afternoons - although she had been doing a lot, so I was not surprised. Her weight had increased a bit (prompting her to be concerned about how much she was going out to restaurants - just her being her, since she spent so much of her adult life struggling to keep her weight in check). She hadn’t gotten back into sewing at all since the surgery largely because she was still having some vision problems. However, I don’t think she was missing the lower right peripheral vision quite as much as she had been – at least she was not bumping into things as often as she was for a while. So either it was clearing up some or she was getting better at compensating. It had only been three weeks since the surgery. And it was still hard to believe she was doing so well so soon.

I was still concerned about the vision though. It was an abrupt change with the surgery. That either meant there was some damage done to her optical track during surgery which then affected her lower-right vision field or there was some residual swelling in the area. If it was damaged in surgery because there was tumor invading that part of the brain, that would be a concern. But we really didn’t want to dwell on what might be the cause. Only time would tell. But whatever it was, she seemed to be adjusting to it fairly well - and doing whatever she needed to do to compensate for the loss of vision field. I watched her pretty closely, though - and it meant I needed to be aware of what was immediately on her right side which she might not see.

The following Sunday was a rough day. We were on our way back to San Francisco for a follow-up visit both in the clinic and the CRC. Maybe because she was tired after a busy week with friends, etc., but Leslie really struggled with her language all day long. She was having real word-finding
difficulties for most of the drive, and was getting a bit frustrated about it (and I think frightened that the tumor might be growing back already since her language seemed to be getting worse). Late afternoon, she tried to do some of her homework for speech therapy - the word and writing exercises that her speech pathologist Sophia had assigned - and really struggled with any kind of writing. But then after just relaxing in the hotel room for awhile, having dinner, walking to the market and to the frozen yogurt store, she seemed to be doing much better till bedtime.

August – A month after the surgery and more difficulties

On Monday, we saw Jane, one of the nurses in the clinic, and Leslie was doing pretty well. Her speech was normal (for her, at least) - with some hesitation and word finding issues, but not nearly as problematic as during the drive the day before. And everything else seemed fine. We saw Dr. Clarke briefly, and she told me to pay close attention to Leslie’s language - and if it got progressively worse, to call her. That conversation concerned me a little as I couldn’t tell if she had been noticing more deficit and was concerned about it or whether she was just being precautionary. We then went to the Clinical Research Center for an EKG - all part of the clinical trial protocol. The EKG was normal (although I still didn’t know what they were concerned about as I hadn’t read anything about this trial drug affecting heart function). Afterwards, we spent much of the afternoon back at the hotel just putting together emails to her friends. That was sometimes very difficult - and it worried me. She was trying to think of what to say and write it out by hand (which seemed to help a little) as I entered what she wrote into the computer. She really struggled with that, but desperately wanted to find a strategy to be able to communicate with her friends. She always wanted to make those notes interesting and clever, and the word-finding issues and the difficulty she sometimes had keeping a thought-stream in mind and how she wanted to say something made that difficult. That evening, we went to the bar and watched Jamie play pool in a league match. She seemed to be doing fine, even though pretty tired – and we ended up staying late.

We packed the car the following day to head home, then drove to Crissy field for a walk from the marina to the Warming Hut and back (a couple of miles or so) just to get some exercise before the long drive. Leslie was having some difficulty with her language while walking (not real unusual) and seemed to be working at it pretty hard. After our walk, while getting a tea and a coffee at the marina to take with us on our drive back, Leslie’s speech suddenly became very slurred and she had a fair amount of facial distortion - her mouth was very crooked with her right side drooping a lot. I immediately took her to a bench outside, gave her some water, tested neural functions, and called the UCSF clinic. Margeretta, one of the nurses, said to come into the clinic right away. The problem only lasted maybe fifteen or twenty minutes - and her face had relaxed back to normal and her speech was no longer slurred by the time we got to the clinic. Dr. Clarke felt that Leslie probably had a mild seizure, which quickly subsided. It was not unusual after brain surgery, even though we did not think she had had anything quite like that happen before. Jenny felt that there was nothing we should do at that point, and she was okay to go home, but that we should watch for similar occurrences. If it were to happen again, she should take 1/2 mg of Ativan. (The Ativan tends to relax the brain, reducing the hyperactivity in the neural pathways that cause these seizures.) She seemed to be okay for the rest of the day on the drive home, although she had some difficulty with her language and I wasn’t sure she was even following what I was saying at times - perhaps just due to the Ativan. She slept a good part of the four-hour drive home but seemed okay by the time we got to the house. But she was very tired, went to bed early, and slept soundly that night. That episode worried me.

This had all been discouraging, at best – and even pretty frightening. We did not know if this was a start of something or if it was just a “hiccup” in the normal progress. Leslie asked whether what had happened was related to the new trial drug, the surgery, or a growing tumor - and although I
tried to reassure her, I didn’t know the answer. (I always tried to be absolutely honest in answering her questions - but also wanted to be reassuring, a delicate balance.) Her concerns were whether the language, thinking, and reading and writing difficulties were just temporary or the way things were going to be - which she said would be very difficult for her to accept. And she was concerned about whether her vision issues, which had not gotten better, were eye related or whether they were actually neurologic - and whether any improvement could be expected over time. But we would not know the answers to any of those questions for awhile.

After a solid night’s sleep at home, Wednesday was considerably better. Leslie’s language was much better - especially in the morning. She dictated an email (writing by hand as I entered it into her iPad), and that was much easier for her than it had been a few days earlier. She did get tired in the afternoon after having been busy most of the day. Thursday, she got together with her quilting friends and that was fun for her, but difficult she said. She was very tired after, and her speech was hesitant and she had a lot of word-finding problems. After a solid night’s sleep, however, Friday was again much better. She did some of her language homework that Sophia had assigned and did pretty well. Saturday was busy in the morning, then we walked (a couple of miles, maybe) and that tired her a lot. Leslie continued to be very concerned about what was causing her language difficulties.

It had by then been a month since the surgery. And after what seemed to be an incredibly quick recovery, and with no side effects from the new clinical trial drug and generally feeling very energetic and hopeful, there was now real concern that things (language, vision, even comprehension) were not only not improving, but seemed to be deteriorating some. That was not what either of us were expecting. And I think we both feared what the cause might be.

Although Leslie had been generally feeling good physically, she was having more difficulty with the language worksheets and we were not sure what was causing it. It was so discouraging for her to have such trouble with reading, spelling, finding words, sounding out words, etc. She said things like, “I know I used to be smart, why can’t I do this?” and “This is what I used to help fifth-graders with.” She even said that she didn’t think that she was ever going to get any better - and was again questioning whether that was because of the surgery, a side-effect of the XL drug, or if the cancer was returning. We would see Dr. Clarke again the following week and would have lots of questions.

Monday was a better day. Leslie seemed more rested and her language was better (although there were the usual word-finding difficulties). We worked on her homework sheets together, went for a walk, then to farmer’s market and the grocery store. She did well and seemed fine through all of it. But she did seem to have some short-term memory issues (all related to language) – difficulty keeping a word or thought-stream or series of words or numbers in mind even for a few minutes sometimes. That, of course, is what made both reading and writing so difficult for her. Her spelling used to be amazingly good - with all her language background in Greek and Latin as a resource. She was the person her friends - even her teacher friends - would go to when they were in doubt about the spelling or the nuanced meaning or etymology of some word. But she was having great difficulty spelling and had little confidence in her ability to even sound out a word or get it right on paper.

She met with Sophia both Friday and Saturday of that week, since we were planning to be in San Francisco most of the following week. They were good sessions – she struggled with some of the exercises, but was clear in her conversations with Sophia. After Saturday’s session, we went for a three mile walk around our Los Osos neighborhood. She did that fine, including doing the hills, and did not appear to be overly tired. However, her language abilities were very deficient the rest of the afternoon. I know she was concerned about all of this and what it meant - we both were.
The language issues were interesting, because they so obviously depended on how tired she was. It speaks to the complexity of language itself, I think, and how the brain must work to process signals transmitted between the various areas of the brain involved with language. The brain has evolved to be very efficient, but still consumes perhaps 20% of our energy in just normal activity in healthy adults. When it has been compromised in some way with damaged or interrupted neural pathways, it cannot be nearly as efficient and it is continually seeking new neural pathways. Since language involves several areas of the brain - word memory and retrieval, articulation, organization, syntax, even the motor cortex to form the words themselves - the neural pathways between the various areas responsible for those functions are all engaged. So the damage done to those areas from the tumor itself, the surgeries, the radiation treatments, and possibly even the targeted chemotherapies had taken its toll. And when she was tired, her brain was not working nearly as efficiently as when she was rested. And all of that became evident through her language abilities - word retrieval, syntax, even keeping the thought-stream going. When she was rested and focused, she did fine. Often, for example, when she was just sitting in her recliner on the phone to a friend, her conversational language seemed very normal. But when she was tired or distracted, her language fell apart first. The concern here was whether the increased language deficit was due to further tumor progression or whether it was just a natural consequence of fatigue. Whatever it was, it was very frustrating for her.

The drive to San Francisco on that mid-August Sunday was uneventful. Leslie was a little concerned as she had a slight nosebleed overnight, and we didn’t know if that was somehow related. Her language was pretty hesitant – with the usual problem of word retrieval, but she continued to work at it. She was good at creating verbal work-arounds, but even then sometimes got stuck. I was getting pretty good at anticipating what she was trying to say and then questioning whether that was what she meant and waiting for confirmation from her. (And she could always tell me whether I had gotten it right.) She was never deficient at understanding - just expressing that understanding.

We met with Dr. Clarke on Monday. Jenny was concerned about the language difficulties as well and whether they were getting worse. Leslie was doing pretty well during the appointment (and all day, for that matter) – and Jenny thought her language deficiencies could easily be some combination of residual from the previous month’s surgery, or perhaps even from that minor seizure two weeks earlier, and any fatigue associated with the new trial drug which might be the only side-effect for her. Although her physical stamina seemed to be okay, she had to work a lot mentally – and that could be contributing to the fatigue and thus exacerbating the language problems. Jenny felt that it was a good idea to continue working with her speech therapist to find strategies that would help. She did not want to rule out the possibility that there could be some tumor growth affecting her language, although there was no other evidence of progression. The next MRI in two weeks at the end of August could tell us more. The physical and neural exams were all good, with no other issues.

Leslie had her vision checked after we got back home. The thorough peripheral vision exam showed that she definitely had lost vision in the lower right quadrant – and both eyes showed exactly the same pattern. The impairment was thus neurologic - very likely related to the left optical track, and not visual and was probably a result of damage during the surgery as it began immediately after the surgery. That was what I had feared - and since it had not improved over the month or more since the surgery as we were hoping, it was probably just the way it would be. Leslie was not happy to hear that. And she also said she thought her difficulties with language were continuing to get worse. She was getting discouraged and worried that this might be the way it would be from now on – and was definitely afraid that it was likely to be due to tumor progression.
All of this was hard on her. Although she still felt so good physically and was still active and enjoying life as much as she could, she was having increasing difficulty with word retrieval, spelling and sounding out words, and even in her reading (which might have also been due to the vision). She had also begun having difficulty in remembering how to do normal everyday tasks like using the DVR remote ("Here, you do it - I messed up again.") as well - and that was new. It’s called apraxia - and I didn’t recognize it at first. She often just had to stop and think carefully about something she was about to do - even when it was something that had always been routine for her (and that surely contributed to the fatigue). And all of that was weighing on her - and worried me a lot.

Then, one evening after a very active day, Leslie talked about her fear that all of this indicated that residual tumor from the last surgery must be growing back already (only five weeks after the operation) and was affecting her thinking, memory, and language. I reminded her that she had just been going all day long and it was always worse when she was tired, that because her neural pathways had had such an assault, all mental activity - especially related to language - would be less efficient and that would increase her fatigue and that would slow her thinking and cause more verbal stumbling. But she said, “I think …” holding up her index finger to indicate something else was coming as she took a notepad and made a small drawing - a small oval within a larger oval, apparently representing an MRI. She then tapped the small oval on her picture and then pointed to the large scar on the left side of her head. She then added a slightly larger oval outside the small one, and said “That’s what I think.” Although she was having more difficulty with language that evening as she was getting tired, the meaning of her sketch - and just four words - was very clear. Comprehension had never been a problem with her. She did not even seem to be distressed by this, but just discussed it matter-of-factly and that we would know more after the following week’s MRI. The next day, after a good night’s sleep, her language was much better.

Leslie had been having some very minor headaches occasionally – they would just come and go. It was interesting only because through all of this time - nearly a year and a half, she had not had any headaches - even with the golf ball sized tumor before her first surgery. So even though they were not serious and seemed to just pass quickly, I knew she was frightened by all of this.

The last week of August – vacationing in San Francisco

We spent a very busy week in San Francisco - a mini-vacation, of sorts. We drove up on Tuesday so Leslie could spend both Wednesday and Thursday with Ruthie, who came from Arcata for their annual “girls in the City” get-together. They went to the Academy of Sciences, which they said was wonderful, then to Jamie’s bar in the afternoon where I met up with them. We then all walked to “Q”, a restaurant we liked a lot on Clement a few blocks from Jamie’s bar. The two of them spent Thursday at the Museum of Modern Art. Although Leslie very much liked being with her best friend, she said it was difficult for her at the museum and very tiring. Some of that was due to her vision problems - making moving around in the crowd, climbing stairs, etc., much more difficult as well as really seeing the art and trying to concentrate on what she was seeing. Reading any of the descriptions would have been impossible for her.

Then on Friday, we went to Stinson Beach to spend the afternoon with Seraphina, Andre, and their daughter Liliana at their vacation rental house. They had been living in Moscow by now for about four years. But they were able to travel and were on vacation in California. Leslie loved Seraphina like a daughter - and had even stayed with her for a week when Liliana was born, as Sera
had lost her own mother by then. So it was wonderful to get together with them again. We took a somewhat difficult walk down a very uncertain path to the tide pools just south of Stinson Beach. It was fun and Leslie did pretty well on that walk - probably a mile each way - which included a big elevation change, uneven terrain, some scrambling on rocks and then the climb back up the path. I don’t think Seraphina ever let go of her - holding her hand or arm for the entire time. I was a bit worried that this would be too difficult for her - but Leslie, being who she was, definitely wanted to do it. She was tired, but did fine - and I think enjoyed the outing a lot. It was difficult largely because of her vision - the loss of the lower-right visual quadrant. She had to be extremely careful about where she stepped on the uneven trail and especially at the tide pools. She stumbled a bit once on our return when she didn’t see a narrowing of the path along the right side. We all felt badly that we hadn’t been watching for it either in order to protect her from the misstep.

But it might have all been too much, especially after Saturday morning’s Crissy Field walk (in which she was walking at a pretty fast pace). After getting back to the hotel, we decided to then walk to the Marina Market to get sandwiches for lunch and I think Leslie had another minor seizure. She was feeling okay but was a little unsteady on her feet and slowed her pace a lot on the way to the store and just seemed to be wandering a bit. I assumed she was just tired. Then I saw that her face seemed a little distorted - and when I asked her to smile, one side drooped noticeably, so I said we had better just head back to our hotel and I’d go to the market later and bring lunch back to the room. She was pretty slow and unsteady getting back and her speech even slurred some by the time we got to our hotel room. She just rested as I went off to the market for sandwiches. We had lunch, I gave her an Ativan, and she slept the rest of the afternoon. I think she tried to do too much over that previous three or four days. I was pretty worried.

All of this, including her increased aphasia, frightened us both. She was pretty sure that there must be new tumor growth that was causing these things to happen. I suspected that Monday’s MRI would be an important measure of whether this was tumor related or just a result of the fatigue, the new trial drug, or something else. I had hoped that there was just some remaining edema from the surgery and that was what caused these problems. We would see Dr. Clarke on Monday. In the meantime, I thought she should take it easy the rest of the day (no choice there) and Sunday. By Saturday evening, she seemed to be better but was a bit slow. We had dinner in the room then went for a frozen yogurt - a short walk of six or eight blocks which she did well on. She then fell asleep while watching television and slept soundly through the night.

Sunday was pretty quiet. She felt good after her solid night’s sleep, but the aphasia was definitely present. A new thing: She had some swelling along her head between her left eye and the surgical site – not unlike the week or two after the surgery. I wasn’t sure what that meant. But it could have been due to some edema that was also causing the language problems. We would ask Monday. She was still having some intermittent headaches – they would just come on at random, maybe once a day, then disappear after a short time (sometimes with the help of a Tylenol). The MRI was scheduled for Monday morning with a doctor visit immediately following. We had a number of questions for Dr. Clarke – although knew the MRI might answer some of them. I knew that Leslie was frightened. So was I.
Questions for Dr. Clarke - August 29:

1. First, the most important one: What does the MRI show?

“The MRI does not look good,” Jenny Clarke said as she walked into the room. Jenny was very disappointed at what she saw in the MRI. The images showed progression into the areas surrounding the surgical cavity. And it appeared that the tumor had grown considerably in only six weeks. The XL147 drug did not seem to be effective against tumor progression – and that dictated taking her off that trial. After less than two months following her surgery, and a new clinical trial drug which seemed to have real promise, there was tumor progression. We all knew what that meant.

There were still ambiguities in the images, Jenny said. But her take on it was definitely that there was tumor progression. The ambiguities included whether there was some swelling and/or infection – and either of those could present similarly to what the images indicated. But any infection should be accompanied by elevated temperature – and she had not had any fever.

She did say that what she was seeing in the images and what she was seeing in the person just did not seem to be consistent. Leslie’s balance, neural functions, and even her stamina (her busy week as evidence!) to some extent were still much better than one would ever expect based on what the magnetic resonance images indicated. Her KPS was down to 80, indicating normal activity with effort, but with some symptoms of disease.

From the Radiologist’s Report:

“Evidence of tumor progression, manifested as interval significant increase in masslike FLAIR hyperintensity and increased abnormal parenchymal enhancement surrounding the resection cavity with increased mass-effect.”

2. What is the most likely cause of the increased language difficulties? Is this a consequence of tumor growth this soon after the resection?

*It is most likely a result of the tumor itself, although some of the difficulty could be pressure caused by some edema. There does not appear to be any infection, however, so it is most likely tumor.*

3. She shows some swelling on the left side of her forehead – between her left eye and the surgical area. What is that about? The swelling had gone down almost completely from the surgery itself weeks ago – could this be increased edema this long after surgery and could that be related to the difficulties she is having?

*The swelling appears to be some leakage of cerebral spinal fluid if there is a small break in the dura surrounding the brain. It is not a problem unless it continues to get worse.*

4. She has had some intermittent, but mild, headaches - maybe every day or two. They come on quickly – seem to be located on the left side – and usually disappear after a very short time.

*The headaches could be due to pressure – either tumor activity or swelling.*
5. She had another seizure, we think, on Saturday. During a 2-3 mile walk she seemed fine – even stretched out her pace a little for awhile. After a short rest, we started to walk to the market. But she seemed to be a bit unsteady, her smile distorted some, and her speech was a bit slurred. It got better fairly quickly, I gave her 1/2 mg Ativan, she ate lunch, then slept for much of the afternoon.

*The seizure could be a result of tumor. If more occur, we should increase the Lyrica dosage to three per day. But that was the right approach to take.*

6. So what are the options at this point?

*She should go off of the XL drug immediately as it does not appear to be effective. There are still options for treatment which we should consider.*

There was a standard drug that was often used with these tumors, CCNU – a “cousin” of the Temodar that she had been on during the first trial, that could have a 15-20% chance of inhibiting further tumor growth. It could be administered by her local oncologist, Deborah Villa. It would be taken in pill form once every six-to-eight weeks. It was similar to Temodar in that it stayed in the system for a long time. There could be considerable nausea for the first week or so following taking the drug and it could cause a lot of fatigue, but it is generally pretty well tolerated.

The other possibility was a new clinical trial drug – a nanoliposomal version of a chemo drug (Irinotecan CPT-11) that had been successful in other cancers, but those forms do not penetrate the blood-brain barrier. In this new form, nano-particles of the drug are imbedded in microscopic lipid globules which *do* penetrate the blood-brain barrier. The drug targets the cancer cells and is designed to inhibit the mechanism for cell division. The trial was to test the effectiveness of the nanoliposomal version of the drug on gliomas as well as to establish the appropriate dosage level. It would require an infusion at UCSF every three weeks - similar to the Avastin. The trial was new and the effectiveness of the treatment wasn’t known. So we should discuss the two options with Dr. Villa in the next week or so before deciding whether to join the new trial.

All of this was a huge setback - and very difficult to take in. It was hard to believe that there had been so much tumor progression in such a short time. Leslie had been so active and feeling good. That said, she had also been very aware of changes - especially the increased difficulty she had with language, vision, and balance - and even, to some extent, comprehension and just doing otherwise routine tasks. And there had been those episodes of possible seizure activity as well as some headaches for the first time in all of this. So I don’t think she was surprised that there would be some tumor progression. We were just not expecting that it would be so extensive this soon and would require abandoning the clinical trial. And we knew this did not bode well.

*Dear Stephanie,*

*It turns out that things are not as good as we had hoped. After Leslie's spectacularly quick recovery from the surgery itself in early July, things have not gone so well since. Her language abilities have deteriorated a lot in the last month. Then this week (Monday), what was to be a routine MRI in SF instead showed considerable tumor progression - which is probably the cause of the increased difficulties, even though she has been on a new clinical trial drug the last six weeks. So it appears that the experimental drug has not been effective at all against the cancer. I haven't seen the radiologist's complete report yet - and there are always ambiguities in the images, so I should know more by the end of this week or early next. There are still some treatment options, but it has all been very discouraging as you can imagine. She is, amazingly, still upbeat and accepting of all of this, and still somewhat hopeful to continue to go on about her life.*
Hi Bill,

Just thought I should bring you up-to-date some. After recovering so quickly from her second surgery two months ago, Leslie also fairly quickly started having more language problems - and that has gotten worse as time has gone on. Then an MRI on Monday showed tumor progression - a real surprise this soon after the surgery. Apparently the clinical trial drug was not effective against the cancer, so she has been pulled off of that protocol. We are still considering a couple of treatment options - one of which is another clinical trial at UCSF. We should know by mid-week - I'm guessing she will opt for the trial. She still feels very good and is healthy in every other respect ("from the neck down", as she says) - and is off doing things with her friends several days a week. But it is a real struggle trying to find what will prevent further progression and she is also working on trying to rebuild her language skills which have deteriorated so. We did spend last week in SF - she got together with her best friend from childhood a couple of days and we saw friends (a former student of mine and her family) who were visiting from Moscow. And we spent some time with Jamie, which was nice.

You are so right about the complexities of language. It involves so much - a complex combination of visualization, conceptualization, verbalization, meaning and context, finding the right word, etc., even without the grammatical, syntactical, and nuance aspects of what make language (and communicating) so interesting. What is so frustrating for her is that she had such a command of it - a consequence, I'm sure, of her classical language background in Latin and early Greek. So to see her struggle with it is difficult - and, of course, I can't imagine how very hard it is for her. (And yet, as I'm writing this, she has been on the phone the last hour to her best friend from childhood and is doing fine - even though I know she is probably finding work-arounds for what she would really like to say.) It is interesting how much different she is when rested compared to when tired or at all distracted. It tells me that the damage to her brain has made it very difficult to multitask, in general, and almost impossible to maintain a thought string if other things are going on around her. When she sits and talks on the phone, she is concentrating much more on just that one thing - and her language is much better. She can read okay, but slowly - but now finds it almost impossible to write either by hand or on the computer. She usually tells me what she wants to say in her emails to friends and I am her scribe. But as I have said, she seems to understand everything - her cerebral cortex is unaffected!

**September - sixteen months after her diagnosis**

September started off about the same as when we left for San Francisco the last week in August. Except we knew that the trial drug she was taking was ineffective - and we had a lot to deal with in deciding what option to take next. But undaunted, Leslie just continued on with her life. She walked with Colleen – and went out for lunch and enjoyed it. But she said her language was very poor all week. I thought she was very tired – and certainly not surprised given that we had just returned from San Francisco the previous evening and it was a very physically and emotionally demanding week. The fatigue probably contributed to the difficulty. In the evening, she seemed to be okay – but she was having a lot of difficulty remembering how to do some of the normal everyday things around the house – using the DVR remote, checking the phone messages, etc. That was frightening for me (and I’m certain for her) as those were always just routine and might be indicating that the tumor was affecting some of her cognitive abilities. And I think she was getting very discouraged. I was hoping that a good day in which she took it a bit easier would help her spirit and confidence some.

That first week of September was quiet – and we just stayed home most of it. Her language was improving some by Thursday and she was doing better in other ways. On Friday, she quilted at Jill’s, went out to lunch, and then we were out together till dinner. She said her language was poor all day – although in the late afternoon, I didn’t think it was worse than on other days when she had been that busy. The swelling on her left temple was still there and I talked with Jenny Clarke that evening and she felt this was just post-surgical, and nothing to worry about. Jenny agreed that she should go back on Decadron to try to reduce any swelling in the brain that might be causing some of the language problems. The next step was to decide on whether to commit to the new clinical trial (NL CPT-11) or
to just do the more traditional CCNU drug. I didn’t sense that Leslie was yet ready to do nothing and just let nature take its course - and that option had not even come up in any of our conversations.

On Saturday, Leslie met with Sophia, her speech pathologist – and it was a really good session as she tried to explain where she was in all of this and the difficulty she was having. Sophia was going over an assessment with her to determine the status of the therapy and the strategy for continuing after the changes that had occurred. My sense? She was more animated and probably better with language than she had been for several weeks – and her thinking seemed to be very good. That might have been a result of reducing some of the swelling since going back on the Decadron. And when she was with Sophia, she was always focused on what they were trying to accomplish. It just reinforced that “multitasking” had become much more difficult - and her language abilities were always better when she was focused. In the afternoon, she went to a movie with Colleen. I was glad she went - it should have been a nice distraction from all the recent stresses. And it tested her a bit, I think - to see if she could both concentrate visually and follow what was being said. I think she enjoyed it a lot - she certainly loved doing things with Colleen, they have always had so much fun together. That was a good afternoon for her.

The language issues were fascinating. Leslie continued to work on her language skills, but sometimes really struggled with such elementary things as writing out the alphabet or even number sequences, but she could understand anything that she heard as well as what she read. When she would get stuck on a word while talking, she could sometimes write the word she was trying to say or at least know what letter it started with, but not always. (Or she might even say something like, “It starts with a ‘4’” - meaning a ‘d’ since that is the fourth letter and Sophia once had her matching letters with numbers on a worksheet!) Or she would find some other work-around. And she was still pretty good at that - finding a way to convey what she was trying to get across even when she couldn’t find the words she wanted. She tried to talk and tell what she was thinking or had done that day or relate some story she had heard from her friends, but with all the word retrieval difficulties, or word substitutions, or just blocked language, it was often hard to follow much of the time. She would say things like, "I know what I want to say, and can even sometimes see the words I want to say, but I just can't quite get them out - and then something else comes instead!" She might look at a clock and know what time it was, and how long she had before she needed to do something - like getting together with a friend or until some show she wanted to watch or how long she had to work on a quilt project before dinner, but couldn't figure out how to say what time it was. Sophia was pretty bewildered as well, I think. Because it was clear that Leslie knew what she wanted to say - but had great difficulty saying it (even though her speech was unaffected). And that must have been so very frustrating for her to work that hard all the time - and it was definitely fatiguing. And yet sometimes she would just say something so naturally. And, as I said, she still seemed to understand everything.

So we just didn't know quite where this was going - or at least we didn’t want to admit it or dwell on it. She was still trying to live life (a lesson for us all, I think), and was working so hard to try to get better at the things she was having so much trouble with. But we still didn't know whether we would find the right protocol that would inhibit further tumor progression - and that was our number one concern.

We both felt that going back on the Decadron had been a help - that is, if it was some swelling that had been causing some of her problems, the drug seemed to be reducing that. She seemed to be having a little less difficulty with language – and it seemed to me that the swelling on the left side of her head had gone down some and she hadn’t mentioned having any headaches. She did complain of more vision issues – she felt that she had lost even more of the right vision field and things were not as sharp as they should be. Since seeing the radiologist’s report, that could be explained by the tumor
involving the left optical tract – which would in turn impact her right visual field (and maybe the visual acuity as well). And that would be consistent with her having first lost the lower-right vision field during the surgery, if Dr. Berger was trying to remove some tumor growth near the left optical tract. I was pretty worried about this as it seemed to me to be indicating more progression.

On Tuesday, we met with Deborah Villa to discuss treatment options. She liked the idea of the NL CPT-11 drug. She had used the standard version of the chemo on other cancers and felt that it was a good drug. The difficulty with gliomas is getting chemotherapy drugs to the tumor through the blood-brain barrier. The nanoliposomal version of the drug is designed to do that and Dr. Villa felt that would be a better choice than the more standard CCNU drug. “If I were in your shoes, I would go with that option.” Leslie trusted Deborah, and I suspected she would take her advice.

Leslie then asked Deborah if she knew why all these aggressive treatments she had been on over the previous year had not been more effective. Deborah’s answer was very direct, “The biology of these tumors is very individual, and people seem to fall into two groups - some have success with the treatments they get but in a much larger group, the tumor is very resistant to whatever drug is used.” And Leslie responded immediately, “But the outcome for both groups is the same.” (Not much has ever slipped by her!) Her comment surprised Deborah who then nodded in agreement, but added, “You are very healthy otherwise, are still active and social, and that is all good. Don’t get bogged down in a reality that isn’t here yet.” But the implication was clear that such a reality was coming.

What still amazed me is how Leslie handled all of this. After we left the doctor’s office, we just sat in the car and talked quietly for awhile. She seemed to accept that this was the way it was going to be. And then we went on about our day, not ignoring what we had just heard, but not dwelling on it either. We went out to lunch, ran some errands in town, and just by chance met up with our friends Colleen and Bruce downtown and joined them at the frozen yogurt shop. It was so much fun to see those two very bright women friends together! Then after we got home, Wendi called to see if she could come over for awhile - and that was really nice as well. It was a good day. Wednesday was even better – a very full day of sewing with Jill, then coming home late in the afternoon for an hour session with Sophia, her speech pathologist, and then going to dinner and a music thing with Colleen. Remarkably, she was tired after all of that (no surprise there), but not exhausted. A great couple of days in spite of the emotional stress of what she was facing. I just wasn’t sure how she did it.

Dear Stephanie,

We have now seen the MRI reports from the radiologist and Jenny Clarke, the UCSF neuro-oncologist who has been the lead in all of her treatment since her first surgery - and there has definitely been tumor progression. We met with her local oncologist the other day to go over treatment options - one is a standard chemo for such tumors and one is another clinical trial. Leslie told her doc that she realizes that this is not going to be successful in the long term, but that she still wanted to do what she could. She still feels very good and is still active, gets together with friends to do things, etc. It is so bizarre, there are times when her language is so compromised and she is also having some other neurologic problems, and yet she spent today with her quilting friends, came home late in the afternoon just in time to work for an hour with her speech pathologist, and then went off to dinner with one of her school teacher friends to a music thing (her friend’s husband plays in a folk band). I’m with you - she never ceases to amaze me.

Thursday was good as well. We walked in the morning then did some things around the house. But she did not sleep well Thursday night – and it showed on Friday, she was so much more tired than usual. But after a solid night’s sleep on Friday, she was back to her usual active self on Saturday. There was such a huge difference between when she was rested and when she was tired.
Sunday was great. Leslie was busy all day – and she sent me out for a round of golf so she could have the house to herself for awhile. (She liked that I would get out to play occasionally, and I even played well that day, which surprised me given the circumstances.) Then Monday we got ready for the trip to San Francisco. I know she was dreading the MRI – not so much because of the MRI itself, but for what she was afraid it would show, as she had sensed more deterioration in both her language and her vision. Then another setback, of sorts, as we got a call while in transit that she would not be able to start the new clinical trial because it required a four week hiatus from any previous chemo treatment, but it had been only two. That was very frustrating – especially if there was significant progression since the MRI two weeks earlier, something she had been fearing. Dr. Clarke felt she should have the scheduled MRI anyway – since that would let us know whether there had been any new tumor growth since the previous scan. And if there had been, if the tumor was growing quickly, it might require abandoning the new trial anyway and just starting the CCNU drug immediately to try to inhibit further progression. Leslie did not sleep well Monday night in anticipation of the scan and the news she feared would follow.

Mid-September

The MRI went well on Tuesday – although it was not comfortable for her following a poor night's sleep, and the anticipation of the results. Additionally, it was another research MRS (magnetic resonance spectroscopy) which included a much more extensive set of tests and well over an hour in the tube. Our meeting with Jenny Clarke, however, was much better than expected. In her view, the images were pretty stable – and did not show the progression we were all afraid might have occurred. If anything, she said, the scans showed some reduced swelling – likely due to the Decadron she had been on for a week. Jenny felt comfortable in delaying any treatment for two more weeks so that she could begin the new clinical trial. The hope was that this new delivery mechanism would be more effective in getting the drug to the tumor than had previously been possible. So we signed the consent form committing to the new trial.

Jamie - Your mom feels great, eats well, sleeps well most of the time, gets together with her friends, has no headaches or balance problems or anything other than the language and vision issues. But her sense is that they are continuing to deteriorate. I know she is anxious about the new trial - just because we don't know how well she will tolerate it nor whether it will be effective. (She also says she is pretty sure it won't work, just like the last one!) I try to keep her from worrying about that, as the new trial is probably the best option at this point.

Colleagues,

As some of you already know, my wife Leslie has been battling a very aggressive brain tumor - a glioblastoma - for nearly a year and a half now. She feels great, given the circumstances - and the two major surgeries and two very aggressive clinical trials that have had limited success at keeping the tumor at bay. But I wanted those of you who know her (and me) to know how she is doing. As she has said, "Except for this," pointing to the large scar on the left side of her head, "there is absolutely nothing wrong with me!" She has been amazing through all of this, and begins yet another clinical trial protocol at UCSF in two weeks. That has kept us on the road to San Francisco a lot over the last sixteen months - and me away from campus. Wish us luck. [An email to my department at the university at the start of the new academic year]

After returning home on Wednesday, we tried to keep busy – partly so as not to think too much about whether there had been any further progression and what might lay ahead. Leslie’s speech was fairly stable – although she was having trouble with some simple language tasks, the worksheets from Sophia, for example, in addition to the word-finding in conversation. She was still quite good, however, at finding work-arounds especially when she was not too tired. She did complain that she
felt her vision was continuing to deteriorate. I was pretty concerned about that as it probably signaled progression onto the optical tract, although I had not mentioned that to her (of course, she probably already assumed it on her own). She had to be very careful about watching where she was moving, often bumping into things on her right side, or just didn’t see things on the lower right. When she was reading, she would often miss the words at the end of a line of text, or she would not see something on the right side of the television screen - and she had to be very careful not to bump a glass of water or cup of tea or something that was on a table to her right.

That Sunday was a good day. Her language was pretty good all day even though she had not slept well. We went for a walk - maybe only two or three miles in the neighborhood, but enough to be moving some. She did stumble and fall once on our walk, however. She just didn’t see the bend in the sidewalk (on her lower right side) and stepped off the curb and went down. I had failed to realize she might not see it in time to warn her. Only some minor scratches, but it did frighten her a bit and reminded us both of how careful she had to be - and how I needed to be aware of possible problems and help her avoid them. And it also reinforced to her that she certainly couldn’t go walking alone anymore. After we got home, we did some light work around the house, went to the market, etc., and she seemed to be fine. She liked going to the market - as an outing, so she could help pick out what we needed, plan meals some, push the cart, and we would often see people we knew.

During the week, we saw Amanda Parreira, her optometrist who had been so helpful through all of this, to see if there was something that could be done to help with her vision issues. Although her visual acuity had not changed much since her last visit, she had lost more of her right-side vision field - the deficit now included a large part of the right half of her vision rather than just the lower right quadrant. There was not realistically anything that could be done optically. And although not said, this was probably a sign that the tumor was involving more of the left optical tract, which controls how the brain processes images from the right side. Dr. Parreira forwarded her findings to Dr. Clarke.

Although she had been wearing a brave face, I knew Leslie was worried about starting the new treatment and whether it would have any impact on the tumor. That was always the hope, of course, but I don’t think she was confident that much could be done. She had even said that she didn’t expect it would work, but was willing to participate in the study if it might help them learn something that could help someone else. But I know she was nervous about it especially since we didn’t know how she would respond to the new drug, or whether she would even be able to tolerate it.

The following Sunday was pretty much spent just getting ready to go to San Francisco again – although she did get together with Colleen and Wendi for awhile in the afternoon. That was all very tiring for her – I think a lot of that was from the stress of what lay ahead, just not knowing how she would tolerate the new trial and whether it would be effective. The new trial drug had to be administered in the hospital - with heavy dosages of anti-nausea drugs (which worried us), and then she needed to be monitored in the hospital for 24 hours the first time. I know she was not looking forward to that. And we both worried about what they thought might happen that required her to be watched so closely.

Monday’s drive north was uneventful. She seemed pretty comfortable, actually – and we talked most of the way. I was surprised that she didn’t seem more nervous with anticipation about what was coming. She still just took it all in stride. And I still find that amazing.
The Third Clinical Trial

We had a big breakfast (Leslie had blueberry pancakes!) at the restaurant at our hotel on Tuesday morning as Leslie said she didn’t know whether she would even feel like eating after starting the new chemo. We then went to the hospital to begin the new clinical trial at the Clinical Research Center and be monitored for the twenty-four hours required by the protocol. Leslie took the anti-nausea drugs and had the required blood tests just before the hour and a half infusion of the nanoliposomal CPT-11 study drug. They then took blood samples periodically as required by the protocol. She slept soundly overnight in the hospital (although didn’t go to bed till very late as we just sat up talking!) and had no nausea or other side effects during the entire 24 hour stay. But she was then very fatigued after, and I didn’t know whether that was from staying up late, a side effect of the new drug or from the aggressive anti-nausea drugs. I watched her closely to see if there were any other side effects – especially in the week or so following the infusion.

I know that Leslie was pretty discouraged. She was fairly sure that the next few months could be her last – as the tumor had progressed rapidly and she did not have much confidence that this new trial would work to impede that. Even if it did, she said, it would not reverse the damage already done – including taking essentially the entire right side of her vision field and causing the language deficits that she had so much of the time. I hoped she was wrong, but suspected she was not.

Thursday, two days after the infusion, was difficult. She was very fatigued and seemed to think it would always be that way. We didn’t know if it was the new trial drug, the anti-nausea meds, just fatigue from her stressful couple of days in SF, or whether the tumor was beginning to cause even more problems. Her language was actually okay. But she just generally didn’t much want to do anything – and I know she was worried and had even been a bit emotional (which probably shouldn’t be surprising, except that she had been taking everything so much in stride until then). Friday and Saturday were about the same - very lethargic. But she had not had any of the gastrointestinal issues that were possible. We were told to expect that any of the strong side effects would hit around the fifth or sixth day after taking the new chemo drug. So my hope was that the worst side effects for her would just be the fatigue and lethargy - and that she would then regain some stamina after the first week or so. If that were so, I expected she would start feeling better as the week went on.

She was beginning to feel a little better by Saturday afternoon and wanted to go into San Luis Obispo to run some errands (Costco, etc.). I think it was good for her to get out – although her vision issues still made it pretty difficult to be in a crowd. She had been eating well, so that had not been affected, and her language was pretty good (or at least no worse). But she wasn’t in much of a mood to get together with friends – probably just because she still didn’t feel very energetic yet.

First week of October

She was still very tired most of the day Sunday and into Monday – and that was very frustrating for her, as she by then wanted to be more active and just didn’t feel well enough. And she commented again that she thought her vision was continuing to deteriorate. She seemed to feel better in the afternoons and evenings as long as she had not pushed herself too much during the day. I just hoped this fatigue was temporary and would get better as she got further from the infusion. The concern about severe gastrointestinal distress and the potential for dehydration had not materialized, however. So we were hoping the fatigue and lethargy early on was the worst of it.
By Tuesday - a full week after the infusion, she was still very tired – and began having some stomach cramping. She was concerned that she might not be able to work with Sophia that day. But when Sophia came, Leslie was rather amazing at what she was able to do - much better than any of us expected given all that had been going on. Her conversational language was pretty good - as it often is with Sophia, and she was doing well with the language exercises Sophia wanted her to work on. Then on Wednesday, her quilting group came to our house for sewing and she seemed to be feeling fine and enjoyed seeing them and having them over. But afterward she told me she was having a lot of trouble with her sewing - mostly because she just couldn’t see well enough. And when they all went out to lunch, she said her vision made everything much more difficult and it was hard for her to even enjoy being at the restaurant. That evening, she even said that she just may not be able to do that again - that it was just too frustrating.

Then she had a lot of stomach and intestinal distress both Thursday and Friday – cramping mostly. This was really the first time since taking the new drug a week and a half earlier that she had been this uncomfortable. She napped most of both days just waiting for it to pass.

But if Friday was a rough day, Friday night was much worse. She had a lot of severe cramping and intestinal distress throughout the night. Then she slept deeply well into Saturday. In fact, it was very difficult to even wake her mid-morning on Saturday and I was very worried about her. When she finally did awaken, she was extremely lethargic - essentially non-responsive, confused, and non-communicative. At one point, only barely even conscious and just staring straight ahead at nothing, she asked groggily in a very weak whisper, “Is this it?” I told her no, that she was extremely dehydrated from the previous night and we needed to get some fluids in her. And I was ultimately able to help her with some water and a little orange juice. I also had her eat a little as well. And then she just fell soundly back asleep. Although her tummy was gurgling, she wasn’t having the intestinal cramping of the previous night and no more episodes. And she slept deeply for two more hours.

The 911 call - The trip to emergency and the lost week!

Then shortly after noon, she awoke to more cramping and needed to get to the bathroom. I tried to help her up, but she was extremely weak. She then just lost consciousness collapsing into my arms. I called 911 and she was rushed to the French Hospital emergency room. She was extremely dehydrated and her blood pressure had dropped to 80/40! The ER doc asked me if she had a DNR request - as he did not know if she would make it through the day. She was running a fever and was very confused and unable to communicate. But an hour or so after she was put on fluids and antibiotics – she fairly quickly became much more alert and even conversant. We were able to just sit and talk about what had happened and she seemed to be much better. They thought she had an infection which caused her temperature to be so elevated, which in turn resulted in her confusion. Her blood tests showed a very low white blood cell count – and the concern was that she would have a hard time fighting an infection. So she was admitted to the hospital in an isolation ward to be closely monitored. By evening, she was alert and conversant, but was still having a lot of intestinal distress. We thought she would probably stay in the hospital all weekend. (Little did we know!)

It seemed like things were getting better by late Sunday and into Monday. Leslie was on a clear liquid diet while staying on IV fluids and antibiotics. And she was pretty alert when awake, talking with me and her nurses. But by the late afternoon and evening each day, she was again having much more difficulty - lots of severe cramping and intestinal distress. This was all very difficult to get under control and wasn’t getting better. Dr. Villa came by each day and was not surprised at the difficulty she was having given her low white cell counts making her pretty susceptible to any infection. But she did not feel that the difficulties were tumor related.
Tuesday was even her birthday, but it certainly was not a happy one. Although feeling somewhat better, alert and conversant, she was still having lots of distress. She had visits from many of her friends and that cheered her up a lot - she certainly enjoyed seeing them. I just so wished it could have been better for her. I stayed with her almost continuously - just reading and trying to help her some. But not much changed for most of the week until the distress finally began to subside a little by Thursday. She actually had been pretty alert through most of it, talked a lot and even joked some about it - and was just so patient. By Friday she was beginning to feel pretty good so she could finally be discharged Saturday morning. After talking with Jenny Clarke, Deborah Villa said that much of the difficulty was with the new chemo - and they would probably reduce the dosage on the next cycle.

So it was a very long and difficult week! She spent all of it in the hospital – nearly all of it on an IV, antibiotics, and a clear liquid diet – and just trying to survive the severe abdominal cramps and diarrhea. It had been pretty awful for her. I do not know how she managed to keep any kind of perspective and especially her sense of humor through it all. And I just hoped it was over.

Saturday – home at last, within minutes of exactly one week since the paramedics transported her to the emergency room (and we did not know what was happening). One of her nurses, Meaghan, took an extra shift Saturday morning just so she could be the discharge nurse - she was so special and had really taken to Leslie, looked after her so, and both Leslie and I liked her a lot as well. So Leslie was finally feeling much better, and was finally home with her own things. But she was awfully tired and very cautious, both with moving around and in what she was willing to try to eat.

Bill,

About Leslie: She is now home (asleep in her recliner in the living room!). That was quite a week! The abdominal issues began suddenly and lasted most of the week! She was on an IV until this morning, when she was discharged. She had obviously been improving the last couple of days - although still bothered by cramping and worse until yesterday. But she has had a full day with little or no distress, is back on what could pass for food, etc. She is quite tired, though, and I'm not sure if that is just a result of this week or still the chemo or what. But the good news is that she feels pretty good and is thrilled to be back at home.

There are some signs that I don't think are very good. My sense is that her language has further deteriorated in the last few weeks. She has also shown some signs of coordination problems with her right side - both her right leg as well as her arm and hand. That could be fatigue related. But it could also be an indication of further penetration of the tumor into motor areas which would affect the right side. We won't know for sure for awhile - probably until her next MRI in November.

It seemed to me that she had lost a lot in that last week – language for sure. It became very difficult for her to get across much of what she wanted to say. She was also having a lot of trouble with right side coordination. She lost strength in both her right arm and leg, and sometimes her right foot seemed to lag behind some or her right hand would just drift when reaching for something. It's called impaired proprioception - being unable to control the position or orientation of her right hand or foot - at least without looking directly at them. I wondered whether that was just from fatigue after such a trying week, and maybe some muscle atrophy from being bed-ridden. But my fear was that there was tumor progression into areas that governed motor control and that affected her strength and coordination in addition to her language – and perhaps even some cognitive function. And then, to top it off, one evening while watching television, she just suddenly lost most of her hair, the first time that had happened with any of the aggressive chemo treatments she had been on (her hair hadn’t grown much all year due to the chemos, but she hadn’t actually lost it). She wasn’t even alarmed so much as just amused - saying, “Now look what’s happening!”, as she showed me hands full. I was very frightened for her – but tried not to show it. None of this was a good sign.
Mid-October

Leslie finally seemed to be feeling better – she had no intestinal issues, was eating well (although still relatively soft foods), and was alert and talking a lot (although with some of the usual difficulty). She was also more stable when walking and was beginning to regain some strength which should also help with coordination. She met with Sophia on Monday to assess her language – and was to have evaluations by a physical therapist, occupational therapist, and an RN in the following day or two just to be sure that things were set up well around the house for her and that she was not too compromised. I had been concerned about her having another chemo treatment so soon after that week in the hospital - and mentioned that to her doctors. So the San Francisco trip for treatment was postponed a few days so she could regain a little of her strength and let her systems adjust after getting home from the hospital before going for another of the infusions that had put her there. Depending on how she was responding, the chemo dosage most likely would be reduced and she would be prescribed some drugs that would hopefully prevent the intestinal distress.

She was still regaining more of her strength and balance through that entire week – and was more able to do for herself. And she was much more active and optimistic. But her vision was a continuing problem and made her very cautious. And it was difficult to follow some of what she was trying to say when she was tired. But she recognized when she was getting tired, and was willing to just nap in her recliner when she needed to and not try to force herself to stay alert and active.

We received a save-the-date announcement from my dear former student Stephanie. She was to marry Jon the following July in Colorado. Even though they had never actually met, Leslie had heard so much about Stephanie that she felt she knew her and would often ask about her and how she was doing, and I would often share Stephanie’s emails with her. So I showed her the announcement (a refrigerator magnet with their photo together) and Leslie was very excited about it, saying, “Oh, that’s great! Go put that on the refrigerator right now, so you don’t forget.” Then she added, “I won’t be able to make it, but you have to go.”

Leslie met with Sophia again on Tuesday, and Sophia worked her pretty hard on her language skills. Then Wednesday, she got together with her quilt group and they took her to lunch (a belated birthday outing). Mud Pie dessert was the deciding factor as to where they went (although that seemed a bit risky to me given her recent issues!). Although she was tired after all of that, she did pretty well and enjoyed it (she had been very uneasy about it in the morning, not knowing whether she would be able to handle it.) On Thursday, we went into town in the morning before the drive to San Francisco in the late afternoon. Her appointment for the infusion was Friday, three and a half weeks after the first treatment which put her in the hospital. We were both pretty nervous about it.

On our drive North along highway 101 - just after returning to the freeway following a stop (and soft-serve ice cream) in King City, she turned to me and said, “You know, we have to talk about this sometime.” Not having any idea what was coming I responded, “Uh … okay … is now a good time?” She nodded yes, thought for a minute then asked, “What will you do with my ashes?” Her question completely surprised me and, after hesitating a moment, I responded that I hadn’t really thought about it, but would certainly honor her wishes. “Why would I care?” she asked (!) “I just wanted to know if you wanted to have a place to go visit me and leave flowers, or if you would rather keep me at home in an urn so you could talk to me, or maybe scatter my ashes somewhere that is meaningful to both you and Jamie”. Then she paused for a bit and added, “I guess I wouldn’t want you to just discard them.” Always amazing. She completely defused what could have been a very difficult discussion. I think it was her way of letting me know that she knew it would not be long. (And I can’t now drive north from King City without thinking of that conversation!)
Especially because of her vision issues, she found it very difficult for us to be driving after sundown. Since we hadn’t gotten off to San Francisco till well after lunch, and took our time on the way up, it was getting dark before we got to the City. The heavy traffic and the glare from all the lights on the freeway really bothered her. I realized we just shouldn’t do that again.

Friday’s meeting with Dr. Clarke was good. She felt all of the issues that sent Leslie to the hospital two weeks earlier were drug related. The dosage of the chemo drug was to be reduced - and hopefully that would reduce the risk of distress. She also felt we could be a bit more proactive to prevent the severe reaction should she show any signs of distress. Although the white blood cell count had gotten low, it was not dangerously so and had recovered very nicely toward the end of that first cycle. Jenny suggested increasing the Decadron dosage again - which might reduce any swelling that could cause the increased difficulty with both language and vision. The downside to doing that could be some loss of leg strength, although she didn’t seem to think that would be much, and a possible increase in blood sugar level and/or blood pressure. So we should watch for those things. The infusion went as planned – although it was much later in the day than we had expected.

Saturday was hard. Leslie was having a lot of trouble – leg strength and coordination as well as speech. She just seemed exhausted. I didn’t know if it was the Decadron (it can cause weakness in the big muscles), some residual effect of the Ativan from the day before, or if it was from the infused chemo itself (which I’m now sure was the case). The long drive home was okay (Leslie slept a lot of it) and we finally got home after a stop at Costco in San Luis Obispo to pick up a few things. (Although she was pretty slow and hung onto the shopping cart for support the whole time, she wanted to go and was able to manage okay - and I was proud of her for doing it. But I wouldn’t ordinarily recommend a trip to Costco on a Saturday afternoon under these circumstances! I watched her very carefully.) She went to bed early. I hoped she would be more lively in the next day or two.

**Late October – 18 months since the first symptoms**

It was late October and a year and a half since the first episode of language blocking – and at that time we had no idea what was coming. As far as we knew at the time, it was just some odd consequence of dehydration or an electrolyte imbalance or something. Two weeks later, we would know for sure. So after a year and a half, it was clear that the tumor was taking its toll - and Leslie was becoming ever more compromised. And yet, she was still trying to do what she could – trying to live life. It was amazing to me how she had handled all of this.

Leslie was very fatigued all day Sunday, the day after returning from San Francisco – much like after the first infusion. She had no nausea, but her leg strength and stamina seemed to be greatly diminished. She spent most of the day in her recliner – although would go back and forth to her room and still did most things without help. She worked some with Sophia on Sunday – and that went okay, although she was not happy with how difficult she was finding it. She worked so hard at trying to maintain as much of her language as she could - to try to decrease the rate at which her language skills were diminishing. I knew she was having increased vision problems and that was frustrating as well. And by later evening, she talked about being so discouraged and was fairly emotional like after that first treatment - which was so unusual for her during all of this. I didn’t think she felt much hope at that point - that it all seemed to be deteriorating faster than either of us had expected.

By mid-week, Leslie had begun feeling a little better - but was still tired much of the time. Although strong enough and balanced enough to do normal things - getting dressed, walking around in the house, etc., she was not comfortable going anywhere outside because of both her vision and balance and so she just didn’t venture very far from the living room. She still worked with Sophia on
her language – but was having a lot of problems with that as well. Sophia was trying to help her preserve her ability to communicate in any way she could. Leslie still understood whatever was said to her - and even knew what she wanted to say, but just could not retrieve the words and it was becoming so very difficult for her and exhausting because she had to work at it so. Her physical therapist, Lynn, was working on some balance exercises - but that was also tiring for her. But there had not been any nausea or other issues as with the first cycle of the new drug. And we were grateful.

A week after the infusion – there were still no real problems. She was very tired and napped a lot during the day. I know she worried about whether the second week would again bring the problems she had after the first treatment. And if it did, I’m sure she would have just wanted to abandon the trial. She had even said she was pretty sure it wasn’t going to work anyway and that the next MRI would show more progression - and they would take her off any treatment if that happened. And, frankly, I felt she was okay with that if it meant she would not have the fatigue and other severe side effects. I think the previous few weeks were really the first time she had felt completely compromised by all of this - and it was affecting her in so many ways, including not particularly wanting to go anywhere or do any of the things she had always enjoyed.

We ventured out a few times - to the market, downtown, etc.. Although tiring, she had been feeling better and I felt the outings helped and she seemed to enjoy them. She was pretty philosophical, though, and often said that she did not feel it would ever get any better, given the vision and proprioception problems. And she just didn’t know how long she would want to continue the treatment if everything was going to be such a struggle - given that the tumor was still likely to progress anyway.

November

Through mid-week, there still were no problems from her last treatment. And Leslie was feeling much more optimistic as the week went on. She continued to work with her therapists - and still seemed to push herself. As she had said often, “I know the tumor is going to take me, but I’m not going to let it get me down.” And her spirit continued to improve as we got further from the infusion. The new clinical trial drug not only affected her physically, but seemed to also very much affect her mood and outlook on life.

Wednesday, she had one of her quilting friends over all day. I think that was pretty tiring, but she was able to do it and seemed to really enjoy the time with Kathi. They even went out to lunch, which was nice – but was also very hard for her. She said it was so difficult - especially with the difficulties she had with both vision and coordination - just going from the parking lot to the restaurant, getting to a table and getting settled, reading the menu, etc. But it made her even more determined to get to where she could do this without having to rely so much on her friends for help with everything.

My sense was that she continued to get better as more time passed since the last treatment. Her conversational language was better, and her stamina and coordination had improved some. She met with Sophia and Lynn, her speech and physical therapists, on Thursday and they both commented on how much better she was doing. So the reduced dosage of the chemo seemed to have made a big difference in how she tolerated the treatment. There was still that first week or more of extreme fatigue, and even feeling so down and maybe even somewhat depressed, but she then started feeling better as she gained some stamina and was able to do more, and enjoy more, as time went on. And she was less emotional and discouraged. Her spirit and mood were much better after that first week.
But she still showed signs of apraxia - the difficulty in doing normal routine tasks even though she was physically capable of doing them. Apraxia and the proprioception issues are both neurologic and have to do with signal processing over neural pathways. So there were by then four significant issues – aphasia, apraxia, proprioception, and vision. The combination was making it difficult for her to function without considerable assistance. And it was almost certainly due to tumor progression.

Leslie was getting ready for bed one night and it seemed like she was spending much more time in the bathroom than usual. So I called to her to see if everything was okay. “No,” she said. So I went in and she was just standing in front of the bathroom sink, “I know I’m supposed to do something here, but I don’t know what.” I don’t know how long she had been standing there. “Have you brushed your teeth?”, I asked. “That’s it!” she said with a wry smile, raising her index finger. Then she just stood there a minute more. “Do you know where your toothbrush is?”, I asked. She shook her head. So I pointed to the cupboard on her right (which she might not even have been able to see!). “Oh, that’s right! Okay - you can leave now.” Leslie had always been very private and independent. So it was very unlike her to show that she couldn’t do this on her own. But this let us both know that she was going to need more help with just normal daily things. And to her credit, she just accepted that.

Dear Stephanie - Leslie has finally been feeling better after her weeklong hospital stay a couple of weeks ago. But that seemed to take a big toll on her. We did go back to SF after only a few days at home for another doctor visit and another treatment. The dosage was reduced, as expected, and she seems to be tolerating it - although there is a lot of fatigue the first week. She has finally felt well enough to venture out - as long as we are together or she is with one or more of her friends.

But it has been a struggle for her, these last couple of months. Vision impairment (loss of right-side visual field) and some right-side weakness and coordination issues (not knowing or being able to control exactly where a foot or hand is located or how it is oriented) have made just walking or any of the normal things we usually do easily much more difficult. Of course, everything that she does is now more work - since everything has to be thought about. And that increase in energy consumption by the brain to just do normal things is fatiguing. And for someone who used to hike the Canadian Rockies and North Cascades, or even recently do five mile walks with friends, it's not easy. I've been doing okay and help as much as I can - but it is difficult to see her struggling to do normal everyday things. She has been so independent for all her adult life, I'm sure she is not thrilled to need help so much of the time. And yet, she still wants to work with her speech therapist (whom we love) to help her with language, and with her physical therapist to work on strength, balance, and mobility so she doesn't feel so dependent. So she is definitely not giving up in any real sense.

The good news was that it had been two weeks since the infusion and she had not had any of the dire consequences of the chemo. Emelia, one of our favorite neuro-nurses (whom Leslie called “the pretty one”) called to ask how things were going – and seemed to think she was clear of any chance of the episodes of cramping and intestinal distress that the first round of chemo caused.

Jamie came down from San Francisco with a friend for a couple of days the first week of November - and spent some time with his mom on Thursday evening just after they got into town and that was nice. But on Friday morning, a lot of emotion spilled out as Leslie said she did not much want to continue with the treatments – and that this was all so hard and it was not going to get any better anyway. “Why would anyone want to put themselves through this?”, she asked. But by mid-day, she was feeling much more upbeat and was looking forward to Jamie’s visit later that day although she was still pretty tired. When Jamie came back in the afternoon we just sat around and talked. It was great having him home - and his mom was really enjoying his visit. At one point she asked him how his “children-people” were - the patrons in his SF bar, many of whom we had gotten to know. That phrase struck us all funny - and became the way we have referred to them since!
He and I had chances to talk some as well. At one point we were out on the patio and Jamie said, 
“This is probably the first problem neither you nor I have been able to solve.” Then he asked, 
“Should I be telling Mom goodbye?”, not knowing what to expect and feeling pretty overwhelmed, I am sure. I said, “You know, we should probably always tell each other goodbye - because we just never know what will happen. But she is still pretty determined and is still on treatment even though she understands where this is headed.” He also asked if I knew what her wishes were. I told him about our conversation about what to do with her ashes - which made him laugh as he thought that was so typically Mom. I also said she did not want to have a memorial of any sort, to which he replied, “Thank god. I can’t imagine getting dressed up so people I don’t know can come by and give me a hug and tell me how sorry they are for my loss.” They both had a gift for words!

Saturday was a good day as well. Leslie felt good and had another great visit from Jamie before he headed back to San Francisco. His visit was a huge boost for her spirit. She so enjoyed his being here. After Jamie left, it continued to be a good day. I think she was so thrilled that he had come - even though we saw him often when we were in San Francisco. So after a good morning, we went into town for lunch and a Costco trip. She walked more than she had in weeks - holding onto the shopping cart all through Costco, and looking at everything! Then, when we got home, she went to her recliner and immediately fell asleep for a couple of hours. Although very tired, I think she felt good and very accomplished that she was able to do as much as she did. Wendi came over late in the afternoon – a great visit that Leslie and I both really enjoyed. Wendi is so special - and it was great to see them together.

My assessment after 18 months? It had gotten much harder for Leslie to do normal things. The tumor had resulted in four “conditions” all of which made life difficult. Either the tumor, the chemotherapy itself, or the increased difficulty to overcome those four conditions (or all of the above) had left her much more fatigued over that last month and she was much more compromised. Her language difficulties had increased since the surgery four months earlier and her vision had worsened. She was not nearly as balanced or as strong as she was in mid-Summer. And all of that had made her wonder how much she wanted to continue with the treatments - or whether the little she was able to do was worth fighting for. And yet, she did not really seem ready to give up. But she did say at one point, “I’ll probably be gone in two months.” We all certainly hoped not.

That said, it still seemed she was doing somewhat better - very tired still, but much better than the previous week. One morning after breakfast we just sat on the bed and talked for about an hour and a half! And her language was as good as it had been in a long time, I thought. She still stumbled verbally some and had word finding problems and might stop in the middle of a sentence and say, “I just can’t tell you this,” or “Well that didn’t help you much, did it?” after fumbling her way through some sentence. At one point when I asked her to repeat something because I didn’t quite catch a word, she responded, “Oh, never mind, I just made that one up,” and laughed. But much of the discussion was very coherent and thoughtful - and we both enjoyed it. It seemed to me both her aphasia and apraxia were better than a week or so earlier. Was that due to being two weeks from the last treatment? We didn’t know, but suspected so. Her physical therapist Lynn was pleased to see how she was improving in both strength and balance. She gave her an exercise intended to help her form new neural pathways that might help overcome the tendency of her right foot to lag when walking. My sense was that if she could recover some of her abilities following the treatments the way she had over that week, she would want to continue doing what she could to fight this.

One evening I noticed that Leslie was counting to herself on her fingers. I asked her what she was counting. She started over out loud, “November, December, January, February, ...” as she unfolded one finger at a time from the fist she had made. “I’m not going to make it,” she said. “You
are not going to make what?”, I asked. “I was counting on two years,” was her answer. All along, she had been aware that the long-term prognosis was not good. Early on she said she hoped to be progression-free for a year - and she got that year, had felt great, and was just living and enjoying life. But given how well she had done, she was then counting on a good second year as well. She thought she could beat the odds. But she was by this time seeing that she was declining rapidly - and doubted that she would still be with us into the Spring. (What I doubt that she knew was that the two-year survival rate is only about 1 in 5. About half of glioblastoma patients die within a year of diagnosis even after surgeries, radiation, and aggressive chemo treatments.) She had done amazingly well - and had been very active and enjoying life through much of that year and a half - and until recently had not even been particularly compromised. But knowing all of that was not much comfort.

On Wednesday of that week, her normal quilting day, Leslie didn’t really want to go sew at Jill’s. She just thought she was too tired, dreaded going out somewhere for lunch since that had become so difficult, and knew she wouldn’t be very conversant or even able to do much with her stitching. I think she was essentially saying that she just wasn’t going to be able to do any of that anymore - that it was just too difficult for her. She wanted me to just go play golf (my usual activity while she was at sewing) - she didn’t want me to miss that chance to be out on my own. I just wasn’t going to do that. To me, she looked pretty tired - and also sounded tired. So I suggested we just drive in together for a short visit with Jill, maybe go somewhere easy for lunch, and just make a day of it with no stress. She was at first insistent that I go play golf instead and just leave her home alone, saying that she would be fine on her own. I told her that I knew she would be, but that I would much rather spend the day with her than go play golf - that I’d had lots of opportunities to play and I just didn’t need to do that as well. It took some convincing, but I won that “argument”.

It was a great visit with both Joe and Jill - just the four of us sitting around their table talking. As we were leaving, Leslie turned to Jill and said, “Please don’t be sad.” I don’t think Jill knew what Leslie meant - but Leslie knew it was the last time she would be visiting. We went for lunch - Subway, I think - and ran an errand or two (I went into the stores while she dozed in the car), then returned home. She did fine, I was very proud of her. But she was very tired when we got home and slept till dinner time. I enjoyed the day tremendously - as I think she did as well.

Thursday was pretty busy. Leslie met with both Lynn and Sophia – and both thought she had done well in those sessions. Lynn signed off on her case, saying it looked like she was compensating well, was well balanced, seemed to be walking better, etc., and that she would not need to continue with her visits for physical therapy. She expected that Leslie would continue to do well using the strategies she had helped her with and knew she would keep up on her exercises.

**A new development – mid-November**

Friday started out like it was going to be a great day. Leslie was energetic and independent, had breakfast, took a shower, and was moving well. We drove into town for the day. The Straight Down Classic pro-am golf tournament was being held at San Luis Country Club, and I wanted to stop by for awhile. I wasn’t going to actually spend much time there, I said, but I wanted to just stop to say hi to some of my golfing friends. Leslie was fine with that, pleased even, and told me to spend as much time as I wanted and she would just relax in the car. We parked close - in handicap parking very near the clubhouse - and very near the Titleist tour van. I didn’t really want to watch any of the golf – I just wanted to see Steve Pelisek, a VP at Titleist, Bob Vokey, and a couple of others whom I had gotten to know pretty well. After chatting with Steve for a bit, he wanted to meet Leslie. He is a very energetic and engaging guy and the two of them had a great chat after he came over to the car to meet her. She enjoyed that a lot since she had heard me talk so much about him. And he said afterward
that he was so impressed with how engaging she was - that she looked great given all that she had gone through and that he never would have guessed in talking with her what she was dealing with.

After leaving the golf course, we went downtown to go to lunch at one of our favorite little sidewalk restaurants just across from Mission Plaza. As we were getting out of the car, she suddenly had very little control over her right side and very little leg strength. We were trying to cross the street to the restaurant when she just collapsed on the sidewalk as her leg completely gave out from under her. We struggled just getting her to a bench where she could sit down while I brought the car closer (and, naturally, it started raining while all that was going on as well!). After finally getting her safely into the car, we still went to lunch - but instead of going into a restaurant, I brought sandwiches to the car and we just sat and talked, watching the rain and eating lunch in the parking lot. We talked about whether this was just another seizure-related incident or something new. When we got home, it was very difficult to get her into the house. Once inside, I ran some of the neural function tests I had seen Jenny Clarke perform. Her arms were strong - with little difference between right and left. Her right arm did tend to sag some when she held her arms in front of her. But her right leg was noticeably weaker and she had little control of her foot. And the sensation of touch was significantly less on her entire right side - her foot, hand, and even cheek. I was not sure what had changed in one day – or even since earlier that day. My guess was that she had a seizure that affected her muscle strength and control. Her language was much worse than earlier in the day as well. Then she napped in her recliner for several hours.

She was much better later in the afternoon. Her leg seemed stronger and more flexible and she had much more control of her right foot than earlier. While she could barely shuffle along (with help) unable to fully support herself when we first got home, she could walk just fine after waking from her nap. I think she had had a seizure that affected her right side - and then recovered quickly.

Saturday started out well. She got up and was pretty independent - getting dressed, walking the hallway, etc., without any difficulty or even requiring any help. She had a good breakfast and was in good spirits as we planned our day. Then sometime late morning, she got up from her recliner, but said her right leg just didn’t feel right. She needed considerable help to get to the hall bathroom - again having right leg strength and coordination problems. Then in getting up from the commode, her leg just folded under her (just as on the day before) and she crumpled to the floor - unhurt, but clearly unable to get up on her own. It was very difficult to even get her back up to a seated position again, as she had no control or strength in her right leg. She didn’t even seem to be frightened by this, but just said, “Now what?” We talked for a bit about what to do next. After being sure she was not hurt and was okay just sitting there - and balanced, I left her alone and went to the local drug store. She  was  still  sitting  on  the  commode  seat  when  I  returned  with  a  walker. She said emphatically, “I’m not going to use that!” when she saw it. I told her that was fine and when she figured out what she wanted to do next to call me and I’d help. After a few minutes, she said, “Maybe I should at least try it.” And she was finally able to get back to the living room using the walker and spent the rest of the afternoon in her recliner. A call to UCSF and Dr. Clarke confirmed what I had suspected. She most likely had a seizure which affected her right side strength and motor control. Jenny recommended increasing the dosage of her Lyrica - to reduce the chances of seizures - and to administer 1/2 mg Ativan following any other such episode. By evening, she seemed to have reasonable control and flexibility in her leg again and had regained some strength. But she used the walker without comment to do any further moving around the house.

We both suspected there had been tumor progression which was causing the additional weakness and seizure activity – so we were not looking forward to the coming MRI and its findings on Monday.
Sunday started off great! Leslie was in great spirits and was able to function well in the morning – using her walker for balance and security. She was getting used to it quickly and appreciated that it let her move around without feeling so insecure about whether her leg would collapse. I called Lynn and told her what had happened, only one day after she had signed off since Leslie seemed to be accommodating so well. She said she would come over a little later to help her work with the walker and to give her some suggestions when transferring from the walker into and out of the car.

After breakfast, we packed for our trip to San Francisco for Monday’s MRI and doctor appointments - and Leslie went through her travel list to be sure I was able to get everything together. (She could read the list, but was not able to say the words on the list - but she could check things off as I got the items together.) Sophia came for a last minute speech therapy session - and it was one of the best sessions in quite awhile, at least in terms of her conversational language. But when given specific language tasks, Leslie was not nearly as good. For example, given a list of nouns she was supposed to read and then identify each of the items - mostly common things we have around the house, she had a lot of difficulty saying the words even though she said she knew each item (much as she had with our travel list). So Sophia suggested that she just indicate whether she knew the words and what they meant, but not even try to say them, since she was having such difficulty that morning which made it frustrating. That, she said, could be a strategy she could use when language failed her and she had trouble retrieving words, since she could just point to those household items on the list when she wanted to refer to them. So Leslie just moved down the list nodding or saying “yes” at each of the words to indicate that she could read them and knew what they meant. When she came to "Earring", for example, she just tugged on her own earrings, but couldn’t say the word. Then she stopped and said, “But there are three and not two.” “Three what?”, I asked. “Of these,” she said pointing to the paper. We didn’t know what she meant, so we looked at the page of words and there was a typo ... it read "Earring" with an extra "r". So how does that work - to be able to read and understand a word, but not be able to say it aloud even though her speech itself wasn’t impaired, and to not be able to identify the letters of the word, but still know that the word itself is mis-spelled? In later relating the story to Jenny Clarke, she said it just points out how little we truly understand about how the brain functions - especially related to language.

The difficulty Leslie had with language was somewhat understandable from a neurological perspective, given the damage to those specific areas of the brain from the tumor, the surgeries, radiation, and targeted chemotherapies. But it was bewildering from a human perspective, since she had perhaps the best command of language of anyone I knew in terms of meaning, syntax, etymology, and just the subtle nuances of our language. And she enjoyed its use so. Even through all of the first clinical trial the previous year, while we were in the hospital’s Clinical Research Center for her infusions, we would play Scrabble on her iPad just to while away the time. And she almost always beat me badly even though “brain damaged” and language deficient by her standards.

Word storage and meaning all seem to be in well localized areas - and I think, having watched her, even word storage is highly compartmentalized. Her difficulty was not in not knowing a word, but in not being able to retrieve it - most commonly nouns (which makes understanding what she was trying to say so difficult). She often did word substitutions, but always nouns for nouns, verbs for verbs, pronouns for pronouns, etc. And through all of this, she always had trouble with gender words - he/she, him/her, boy/girl, man/woman, etc. had often been interchangeable pairs, but always with the correct part of speech (whether subject or object “he/she” or “him/her”, for example). So it seems as if those words are stored in the same locations, and she would just grab the wrong one (and often did not hear the difference), but the learned grammatical rules are encoded somewhere else and those neural pathways were not compromised. It required me to listen carefully to her, repeat some of it - and see if my understanding of what she said was correct. Conversations could take a long time!
The two areas of the brain that are responsible for articulation, syntax, spacial relationships, etc. are the Wernicke and Broca areas in the left temporal lobe, while meanings are encoded throughout the cerebral cortex. To communicate verbally, neural signals go back and forth between those areas in the brain and then to the motor areas that control how one actually forms the phonemes to verbalize words. Of course, the left temporal lobe is where the tumor, the two surgeries, and the targeted radiation had all been. So a lot of that neural network had been impaired. So word retrieval, precise syntax, etc., were all compromised - although verbalization was not. But comprehension is in the cerebral cortex, which was undamaged. So she knew exactly what she was trying to say, but often just couldn’t get there - so said, "Oh, never mind!" or "That didn't help you at all, did it?", or something, when she got stuck. She had once said, "It’s like having tunnel vision, but with language. I know what I want to say, but the words are off to the side and I can't quite make them out." And that must have been one of the more articulate descriptions of expressive aphasia I have ever heard! I can’t imagine how frustrating it must have been for her.

So that Sunday morning was good in spite of the difficulties. I had thought the anxiety about the upcoming MRI and what we might learn from it would make it difficult for her that morning. But she seemed to be very lively and engaged. Lynn then came over to work with Leslie a bit on how to get in and out of the car using the walker before we got away. And then we were off to San Francisco.

When we stopped at King City and then again at Gilroy, Leslie had great difficulty moving around even with the walker - her right leg and foot just didn’t seem to want to cooperate. It seemed to be much worse than in the morning. She used the walker to keep stable and it was completely necessary - but it was very slow going, and I worried about her stumbling. It was also exhausting - and she slept in the car after each of those stops. But her spirit was still great all day even though she was so newly compromised and I knew she was worried about the MRI and what she suspected would be the interpretation. As anxiety ridden as that must have been for her, she still seemed to be ready to hear what the scan was going to tell us. It was absolutely amazing how she handled all of that! I was certainly worried about what we would find out, as well.

While we were driving toward San Francisco, in Sunday traffic, Leslie reached over and tapped the four rings at the center of my steering wheel. “Another of these?”, she asked. “Are you asking if I will buy another Audi?” “I am.” I responded that I probably would eventually, since this one was eleven years old, I still liked it, and it had been a very good car. “Then let’s go buy one,” she said. I hesitated trying to think how to respond, then finally said that it wasn’t really a good time to be shopping for a new car just then (as if I really wanted to deal with any of that at the time), but that sometime I probably would. “Promise?” She spent the rest of the drive into the City pointing out dark metallic grey Audis, saying “That one.” Her way, I think, of telling me I needed to be thinking about my own future, but that she also still wanted to be involved!

A very stressful Monday. We were able to get a wheelchair at both the imaging center and the clinic – so getting around was easier (“possible” is a better word, since I don’t think she could have made it with just a walker). But after taking Ativan prior to the MRI and with all the other issues, the rest of the day was very hard for her. Dr. Clarke’s assessment was that everything was relatively stable in the images. Actually, some of it looked better than in September - less edema. But there were still some areas she wanted to watch closely, as it appeared there could have been some progression. But she did not think there was nearly as much change as she feared given that Leslie was now so much more compromised. She was pretty sure that the episodes where Leslie’s leg went out from under her and she lost nearly all control of her right foot were probably due to seizures. She was hoping that reducing the seizure activity could reverse some of that (but warned that seizures can also cause irreversible damage). But Jenny still recommended that Leslie proceed with the trial.
From Dr. Clarke’s report:

*She is a mildly fatigued-appearing woman with a KPS of 60 [i.e., requires assistance, down from 80 in August]. The exam is notable for ongoing significant expressive aphasia and right homonymous hemianopsia [the loss of right field of vision]. She does seem to have full strength in all limbs, but clearly has difficulty coordinating use of the right arm and leg.*

While at Dr. Clarke’s office, Leslie did not show the extreme weakness in her right leg that we had seen the day before - although she did not try to walk on her own for fear of falling. We then went to the CRC for her third cycle of the chemo infusion.

Wednesday’s trip home was very stressful. I guess it was a combination of the extreme fatigue factor of the new chemo and the two anti-nausea drugs, but Leslie was extremely weak all day - just as she had been the previous two times. She struggled to even use the walker to go to breakfast at the restaurant downstairs in our hotel. (I could have gotten our breakfasts and brought them to the room, but she really wanted to go to the cafe. I wasn’t going to deny her that.) She then slept most of the time on the road. When we stopped for lunch, her leg completely collapsed out from under her again, and we needed help just to get her back into the car and then again into the house when we got home a couple of hours later. She had very little control over her right foot and even her right hand – extreme proprioception issues. The walker was almost of no use at this point - partly because she lost so much strength and coordination in her right arm as well, so could not support herself just with the left. By evening, I didn’t know whether she would even be able to support herself in walking down the hallway to the bedroom, so I went to the drugstore to purchase a folding transport chair. I was not sure what was going on, but hoped it was just the side effects from the new chemo drug and she would be stronger in a few days. But I had my fears that this was very quickly degenerating.

Friday was hard for her – she seemed even more fatigued than the day before. We had an appointment with Dr. Villa and even getting her to the appointment and into the doctor’s office was difficult. Dr. Villa thought it was the right decision to continue with the trial mostly because the alternative (probably the drug CCNU) is not a particularly successful treatment and has rather severe side effects of nausea and fatigue. She was hoping that the fatigue from her recent treatment would subside over the next week. Leslie then slept most of the afternoon and went to bed early as well. She just seemed very weak all day.

By that weekend Leslie started to feel better. She had no nausea, thankfully, and was eating well and seemed to be better coordinated, although she still got tired quickly. She would nap in the afternoons and still go to bed fairly early. Even by Tuesday, a full week after the infusion, she sometimes had difficulty standing, and preferred the wheelchair over the walker even to just go down the hallway. Even with the physical training she was getting, her right foot would get stuck - sometimes behind her - when she tried walking. So there was a real fall-risk with the walker. And she was having more trouble with her right hand as well – she often just didn’t quite know where it was or couldn’t move it as she wanted. (“Now what is it doing?”, she would ask when it drifted as she reached for something.) That was all very likely due to tumor progression - which must have been encroaching on areas that control motor function. So I saw no reason to encourage the use of the walker (even though she tried it occasionally) over just wheeling her wherever she wanted to go. She would lose some leg strength by not pushing herself physically, but she was also less likely to fall - and that was a big concern.
Thanksgiving

Thanksgiving had always been about our favorite holiday, because it is so about family and relaxing and there is little pressure or unrealistic expectations. This one was very quiet - we just enjoyed our own day at home thankful for small things. Lynn, bless her heart, brought two plates of Thanksgiving dinner - pumpkin pie included. That was so nice of her – above and beyond. Both Lynn and Sophia have been so much more than just Leslie’s physical and speech therapists! Leslie was pretty lively and upbeat all day. She still didn’t really feel strong enough to do much, but was so bored doing nothing. She watched more television than ever just to have something to do. I don’t even know how much attention she paid to it or whether she was even trying to follow what was on. But she felt less isolated with some show on and so seemed to prefer having it. By Thursday evening, she was having more right-side coordination problems than usual. When she was fatigued, it was very difficult for her to use the walker, or to even get up out of her chair with my help. I had hoped that it was just the fatigue and would get better during the week. But I wasn’t sure.

On Friday - a full week and a half after the infusion - Leslie was very lethargic. Both right-side strength and coordination were very poor and she couldn’t control her right leg. Her right arm and hand also seemed much more compromised and even her countenance was drooping some. She was also much less sensitive to touch on her entire right side. (I suspected there had been some seizure activity, as had happened before.) Lynn stopped by again just to say hello and noticed the changes immediately from just the day before. She told Leslie to just take it easy the remainder of the day and not to even try to do any of her exercises, then Lynn wondered aloud rhetorically, “I wonder what’s causing the increased difficulty?” Leslie looked directly at me and said, “I think it is exactly what you think it is.” – leaving the cause unspoken. For someone with extreme expressive aphasia, that ten-word statement was very clear in expressing what she was sure was happening to her.

Leslie then seemed to feel much better after napping awhile – and she even commented on how everything was better that afternoon. She was always quite aware of how she was doing - and would often comment. (She must have had a mild seizure that morning, and then recovered.) She had dinner, watched some television and was in bed and sound asleep early. By Saturday, she was better yet. She was livelier, her language was better, her countenance was not drooping as it had been the previous morning, and she didn’t even nap much during the day. But she still had little right side strength and coordination - so she had to be very careful when reaching for something or trying to hold a glass of water or cup of tea. She often bumped things on her right as she just didn’t have much control of her hand or even knew where it was. And she couldn’t see things that were on her lower right, either, which made it even worse. We had to be pretty careful about what was on her right side.

She had again begun to question whether to continue with the trial, especially if that was what was causing so much fatigue. The alternative would be to just curtail treatment and let the disease take its course – and possibly not be as fatigued for awhile.

Sophia was scheduled to come over on Saturday, but Leslie questioned whether that was even useful. She liked having Sophia come and always seemed to liven up for her even though Sophia worked her pretty hard. But she wondered if it was helping - and didn’t want Sophia to feel like she was wasting her time (always thinking about how the other person was dealing with this!). I said I thought she should let Sophia decide whether what she was doing was helpful. When she came, Sophia reiterated that she felt it was important for Leslie to try to maintain her communication skills - and her goal at that point was to help her with that however she could - to keep those skills from diminishing further and to give her some strategies to help her communicate when she was having word finding problems. We both liked her so, she was always so positive.
By two weeks after her infusion, Leslie was doing better but was still pretty slow. She still napped a lot – partly out of boredom since it was so difficult for her to read or do any of her stitching. But she seemed to feel okay. She was pretty lively and engaged some days, but other times she would just doze in her chair most of the day. I think she was thinking that this was just another sign of tumor progression as she was compromised in so many ways - and there may be no reason to continue trying to fight it. And I was afraid she might be right if the treatment was the cause of so much fatigue and weakness – especially if all it would do is prolong her feeling like that. But I was still hoping the last week of the cycle would be better for her. Then the question would become whether it was worth that much distress for an occasional good week.

I had talked with Dr. Clarke who felt another scan the following week was called for to see if the fatigue and lethargy were disease or treatment related. The MRI was scheduled for the Monday (in San Luis Obispo) before an appointment to see Jenny on Wednesday at UCSF. There were several outcomes that I could anticipate: If there was no tumor progression (after all, it had only been three weeks since the last scan), that could indicate either that she should continue with the treatment or it could suggest a short hiatus from the treatment to see if she recovered more of her stamina and coordination before the next infusion. If there were progression, we would have to decide whether to continue with treatment or just let nature take its course – a very daunting prospect.

Eric

Back in September, I had just stopped by campus one morning to check my mailbox and see old colleagues who were back for the start of the new academic year, and I ran into a former student of mine. She was back on campus as a new faculty member after having completed her doctorate and a couple of post-doc research positions - one of which was in neuroscience at UCSF. In talking with her, I told her what Leslie was going through, and she immediately said that a very good friend of hers, a research physicist at SRI in Menlo Park, was battling the same tumor! She said we really ought to be in touch since his case sounded very similar to Leslie’s. She also said he had been documenting his entire ordeal in a blog which he posted online. So I emailed Eric, who was also being treated through UCSF (with all the same doctors and nurses). And we then kept in touch, emailing back and forth fairly often about how things were going at the time, discussing test results and treatment options, and mostly just offering support for each other.

_Eric - I suspect you (like me) have learned a lot about things you never before wanted to know - about these tumors, chemotherapies and their side effects, how to read brain MRIs, the technology of the treatments, how language works and what happens when those neural connections are interrupted ... the list goes on. The irony of all of this is that Leslie had probably a better command of language than anyone I know - a result of her undergraduate years studying classical languages. And now, it is very different. She still understands essentially anything she hears or reads - but she has such a difficult time articulating any of it. Language, of course, is not our primary concern, but is an indicator._

The online blog that he had been writing was to keep his family and friends up-to-date on what was happening in his case. It was titled, “42 Staples”. I asked him once, “Were there actually 42 staples, or does “42” have something to do with Douglas Adams and the Answer to the Ultimate Question of Life, the Universe, and Everything - or is that the same thing?” As serious as all of this was, as a science fiction aficionado as well as a research scientist, he enjoyed the reference - and the attempt to make him smile.
December

Finally, Leslie was generally feeling better. Although she would still tire easily, she was not as stressed or lethargic as she had been the previous week. Her language hadn’t improved much, however. She still seemed to know exactly what she wanted to say and would start a sentence then get stuck. As she got tired, her language became even more scattered, making it difficult to follow. She was very aware that she was not saying what she wanted to, but sometimes said she just didn’t know why I couldn’t figure out what she was trying to say. Very frustrating - for both of us, because I desperately wanted to help her as well as to know what she was thinking and feeling. She had still been eating well, sleeping well, seemed more interested in things, and was generally feeling pretty good again. That said, in addition to the language problems, she had not regained much strength in her legs, was very unsure of herself with her right side, and had some apraxia – sometimes finding it difficult to remember how to do just normal everyday things. She had very little strength or coordination in her right hand, and she often didn’t even know where it was - it might just drift if she tried to reach for something, or would just hang to her side and she wasn’t aware of where it was. She even found that a bit amusing sometimes, saying, “Where is it?” or “Why is it doing that?” when it drifted. It was all exacerbated, of course, by her not being able to see anything on her right side without looking directly at it. I had to be paying attention, for example, when wheeling her down the hallway as her arm would sometimes hang outside the wheelchair - and it was easy to bump her elbow on a door jamb or something. I really needed to watch carefully.

But it was nice that the fatigue was not nearly as severe as it had been and she generally felt much better - and she was aware that she was feeling better. She was very lively all day that Sunday including meeting with Sophia in the morning. Somehow, those meetings to work on language always seemed to bring out the best in her. She liked Sophia so, and wanted desperately to improve her communication skills - or at least not let them diminish so quickly. And she always seemed so focused when Sophia was at the house. After lunch, she napped for awhile, as usual. Then Wendi came over late in the afternoon, and they had a really good visit, even though she was pretty tired. Leslie just loved Wendi - almost like a little sister, I think. Wendi had always spent Sundays preparing for the week’s teaching at Baywood Elementary. And for years, Leslie would go to the school to help her however she could - grading or recording or filing papers, etc. I think she missed doing that - even though she knew it was no longer possible. So it was a real treat to have Wendi come over after her Sunday in the classroom preparing.

Hi Bill,

Not much news here, but thought I should follow up a bit. The first two full weeks after the last treatment (about the time I last wrote) were pretty rough. No real nausea problems or worse to speak of, but just extreme fatigue - to the extent that Leslie didn’t want to do much. She slept a lot and ate okay, but wasn’t very interested, and didn’t even much want to see her friends. She said that she just wasn’t sure that she even wanted to continue with the treatments if this was the way it was going to be. Then by Tuesday or Wednesday of this week, she started to feel much better and has been pretty full of life the last couple of days. She still fatigues quickly, isn’t really able to get around on her own, and naps some in the afternoon, but was very much her old self (uhh ... "old" - meant to convey "former" not some age thing!). So I think now she is somewhat ready to continue with whatever is necessary to to fight this! The UCSF people thought it would be a good idea to have another MRI - even though it had only been three weeks since the last one - just to see whether something was going on that was missed on the previous one. So tomorrow, we go in for the scan (locally), then back to SF on Tuesday for a doctor appointment on Wednesday. My guess is that the scan will be ambiguous - but probably will not show any significant progression and they will decide the increase in issues she was having (fatigue, strength, coordination ...) were chemo effects and not tumor. Then
the question will undoubtedly be whether to continue with another treatment, maybe reduce the dosage, possibly take a short hiatus and let her recover from the effects a bit more, ....or whatever. Won't know till we meet with the neuro-oncologist.

Language is continuing to be an issue. I have to do a lot of guessing to know what she is trying to tell me - but we either work it out or she just says "never mind". She met with her speech pathologist today - and it was a very good session. She was having Leslie just repeat words back to her as she would say similarly sounding words, and Leslie was doing fine - even getting all the subtle phoneme differences between similar words. Then after ten or twelve successive words, she would start getting tired and would get stuck and would have to rest a bit. At one point, instead of repeating "stick" she would say "thick" - several successive times, knowing it wasn't right. Then she just stopped and said "What's with this 'th' thing?" Amazing, she could hear the difference, but couldn't say it correctly. And she wasn't looking at the words, just repeating the sounds as Sophia said them, and she has not been able to identify the letters and the sounds they make for awhile now. So all of that is still in there somewhere, just not retrievable most of the time. Another time, after responding to a dozen or so words one after the other, she just couldn't repeat the word "soar" correctly after hearing it. She kept saying "shore" over and over. Then she asked, "Why can't I say that? It's a perfectly good verb!", just as clearly as any of us could say it. It is just hard to know how the brain works with language.

Monday was a rough day, however. She had to be at the pathology lab early, then into San Luis Obispo for the MRI needed for her UCSF appointment on Wednesday. She was having a harder time than usual with coordination and strength all day - even getting her in and out of the wheelchair was difficult. The MRI itself went okay. Then she had a very long eye exam to see if her vision could be improved with a new prescription (the exam was made difficult partly because she could no longer say the letters on the eye charts or communicate clearly what she was seeing during the tests!). We didn’t get home until nearly dark. It was a very long day and she was really pretty scattered for most of it. I think the combination of the Ativan taken before the MRI and the general level of fatigue took its toll. She was just exhausted by the time we got home. I was worried about whether she would be okay for the trip to San Francisco the next day.

As I looked at the MRI results that evening (using my downloaded imaging software for viewing these scans), I did not see a lot of difference from the previous scan. The resolution was certainly higher due to the high field magnetic resonance imaging machine. And there were more areas that brightened with the contrast agent, but I didn’t know if that was tumor or just a result of the higher resolution imaging. I hoped the UCSF people would be able to interpret the differences between this and the previous scan (and, of course, also hoped that what the scans showed was just more detail and did not indicate tumor progression after only three weeks). We wouldn’t know until Wednesday.

The drive to San Francisco was uneventful. After such a hard day previously, she was very sluggish on the drive and slept most of it. Her voice was very weak through most of the day – but got a bit better by evening. Ruthie had driven down from Arcata - both to see her daughter Joy and to see Leslie. She came to the hotel to visit some in the late afternoon and evening – and that was really nice, for all three of us. We all had a Pacific Catch dinner - wasabi rice bowls with salmon (Leslie’s favorite) - brought back to the hotel room, and we spent the evening in the room just chatting. Leslie and Ruth have been close since kindergarten(!) - so it is always great to see them together.

Wednesday’s appointment with Dr. Clarke was what we had thought – and had feared – it would be. The MRI showed more clearly that there had been increased progression of the tumor into areas that were affecting her right side motor control. It was still not definitive, but what was ambiguous in the previous scan showed more clearly that the tumor had continued to grow. Jenny no longer felt that the new drug at the dosage that Leslie could tolerate was being effective. So she said we should suspend the clinical trial - that it was not preventing further tumor progression.
The only good news here was that Leslie would not have the infusion and then have to go through the next two weeks of extreme fatigue and all the related side effects. And, frankly, I think she was relieved by that decision - especially since she had been questioning whether she wanted to continue with it anyway. But if left untreated, that also meant that the tumor would progress more rapidly – and that would probably further impair speech, neurological function, and right-side strength and coordination … followed by the inevitable. This news was not exactly unexpected, but at the same time, it was not easy to hear.

There was another drug option – the CCNU drug that was mentioned a number of months earlier. It is a pill that is taken every eight weeks. Previously, Dr. Clarke had given it a 15-20% chance to be somewhat effective against the tumor. Its side-effects include heavy nausea at first followed by significant fatigue over five to six weeks. I doubted very much that Leslie would want to go through that – especially given how the fatigue had already been affecting her. And as Jenny said, it really was a personal choice that only she could make. She said that probably her best days would be no better than those of the previous week when she felt okay. But there would also be worse days. And the question would be whether to just prolong life and be satisfied with just trying to get through each day knowing that the drug to do that will also have its side effects or to let nature take its course.

When Leslie asked “How long?”, Jenny answered “perhaps two or three months”.

From Dr. Clarke’s Report – December 7:

She is a fatigued, mildly cushingoid appearing woman with a KPS of 50 [requiring considerable assistance - down from 60 three weeks earlier]. She is weak, with really no movement in the right arm or leg at all, and appears to have minimal sensation on the right side. Noted [in the MRI] is increased abnormality and enhancement in the left temporal lobe with some mass effect on the left ventricle. There is also, I think, some mild increase in size of the mass in the left parietal region, near the motor and sensory pathways.

The option I favor at this point would be supportive care alone. The goal of any treatment would be to slow tumor growth and perhaps stabilize things for a short period of time rather than any expectation of tumor shrinkage or improvement in symptoms. I suspect her prognosis is on order of 3 months.

That last drive home the next day was pretty somber but okay, surprisingly, as we tried to process what we had just learned. Leslie was pretty exhausted - both physically and emotionally, which was not surprising - and she slept most of the way in the car. We did stop for a late lunch - at an Applebee’s in Salinas. Once settled after the difficulty of maneuvering through the restaurant in the wheelchair and getting to a table, Leslie looked at the glossy menu and pointed to a picture of a fish and chips dinner and said “This.” And that was a surprise - in 43 years of marriage, she had never ordered fish and chips! I said, “Really? Are you sure that’s what you want?” - and her look told me she wouldn’t have said so if she hadn’t meant it! So we shared the order and we both enjoyed it! We agreed that should we ever be up that way again, we should stop there for lunch. But we both knew.

After we got home, Leslie watched a little television and was in bed early and went fast asleep. One concern that was new was with her right arm and hand. In just a few weeks, she had lost strength and control in her right arm. But in Dr. Clarke’s office on Wed., her forearm and hand were very swollen – almost like a balloon! Jenny said that was not unusual when there has been a loss of muscle control, since the continuing action of the muscles is necessary for good circulation and the lack of it tends to allow fluid to collect in the extremities. We would need to do something about that.
Friday at home was much better. Leslie seemed much more rested and alert. She even wanted to go into town, which really surprised me! I think she knew it would probably be her last time to do that. So we spent some time in the morning working to reduce the arm swelling – massaging the arm and hand, using a cold compress, etc. – so that we could remove her rings on that hand so the swelling would not cut off circulation to her fingers. We then went into town to have lunch (sandwiches and soft serve ice cream in the car at a Subway!) and run a couple of errands – including going to her optometrist’s office to order new lenses for her glasses, hoping that it would help a little with her vision. All of that left her pretty tired and she slept a couple of hours in the afternoon. But she was then much more lively in the evening than she had been for a number of days. I think it was amazing that she just accepted the curtailment of any treatment so easily. She was not depressed or anxious or afraid - but just recognized that this was the way it would be and she would make the best of it. And I think she was very relieved that she did not have to fight the nausea and fatigue of the chemo - if all that would do was possibly postpone the inevitable a short time longer. I think she was completely comfortable with the idea that she would remain drug free after all she had gone through.

I talked with the Director of Patient Services for Hospice on that Friday. Although that was not an easy call to make, it was a very useful and necessary conversation. We had known that this time would come - but it had always been somewhat in the abstract. But making that call to Hospice made the inevitability of it very real - and it was difficult for me to do. The essential criterion for using their services was that she be diagnosed as terminal with less than six months to live and that she was no longer actively treating her illness. Leslie definitely qualified assuming she did not pursue any new treatment. We would talk with Dr. Villa early the following week, but I was sure she did not want more chemotherapy.

The weekend was uneventful. Leslie looked forward to each meal and was still eating well – then usually napped most of the rest of the time. But remarkably, she did not seem anxious or distressed about not continuing the fight. I think she had come to terms with being treatment free and was completely accepting the outcome.

**Mid-December**

I think Leslie was continuing to function better as she got further from her last chemo treatment - it had been a month since the infusion. She still tired easily, but did not seem to be having any distress. Her routine was to get up, have breakfast, then just doze for awhile mid-to-late morning. After a good lunch, she often again took a nap till mid-afternoon. Then she would watch some TV in the afternoon, have dinner, watch a couple of evening shows, and be off to bed. She was probably sleeping about 14-15 hours a day. But her strength hadn’t really come back much - something we had both hoped for, but weren’t getting. Sometimes in being transferred from her recliner to the wheelchair - or vice versa, she could stand up (with a little help just to stabilize her) and felt very stable, and other times, she could barely get up and was very unbalanced, and that made it difficult for us both. And we could never tell which it would be! Her right-side was not much help in getting up - so much of it depended on how stable she felt pushing off with her arms and the strength of her left leg and her sense of balance. It was always a bit of an adventure (and probably risky)!

I put up a Christmas tree in the living room – a small one, but nice, and decorated it with lights and ornaments. And I think it cheered her up a lot - she seemed to like that I had done that. She was certainly aware that Christmas was only a week or so away and that Jamie would be there – and it looked as if Ruthie would be able to come down from Arcata again as well. And she was definitely looking forward to both of those visits.
On Tuesday, Dr. Villa called. She had talked with Dr. Clarke at the end of the previous week about the recent MRI showing more progression, the suspension of the clinical trial which had been insufficiently beneficial, and that there really were no good options for further treatment. She agreed with me that it was probably time to engage hospice and just try to keep Leslie as comfortable as possible – with the hope that she would generally feel better for awhile. Deborah Villa has been wonderful through all of this – so supportive and encouraging. And we both trusted her advice. But it must be so difficult to tell patients and their families that there is nothing more they can do.

It was difficult to think about curtailing aggressive treatment to inhibit further progression of the cancer. We had been fighting this tumor for nearly twenty months – it had become our lives. So it was hard to give up that fight. But we needed to face that reality with the understanding that we always knew this time would come, as there is no cure. We just didn’t expect it to come this soon.

Wendi visited again that afternoon. What a pleasure to see her and her visits always helped Leslie. I know Leslie liked having her here - and I always liked seeing Wendi as well and watching the two of them together. Later that evening, Wendi sent the following email:

_I want to be spending each day with Leslie:) I so treasure her friendship. I have learned so much from her. I truly believe she helped build the teacher I am today. I think back on the hours of time we wrestled with every challenge we educators are handed throughout the day - from challenging students to pesky computer issues to curricular choices and the philosophical machinations of each. So many discussions within school are about the little stuff. With Leslie, and with you, I am able to discuss the big stuff as well. She is one of the smartest people I know._

No wonder we both loved Wendi so.

The rest of the week was about the same. Leslie had generally been feeling okay – but was sleeping a lot, both at night and during the day. She still met with Sophia occasionally, who just offered some suggestions for communicating when her language was “stuck”. Lynn had also visited and suggested some light exercises, in order to improve circulation, and suggested methods for transferring her from chair to wheelchair, etc., just to make those transfers easier and less risky.

Hospice

By Friday, we formally enrolled (if that is the right word) with Central Coast Hospice. We were both very impressed with Lisa, the hospice RN and Leslie’s case manager. Leslie was very engaged in the discussion on that first visit. Her vital signs were all good, but her KPS was by then down to 40, meaning completely disabled requiring considerable assistance. The hospice program is designed to be a very efficient way to let a patient remain at home, stay comfortable, be monitored, have an appropriate amount of nursing care, etc. – hopefully avoiding 911 calls and trips to the ER if things were to change suddenly. So it was a huge help to me to know that there would be skilled nursing available and that Leslie’s care would be managed by people who both cared and were trained in this while still allowing as much independence and normalcy as possible here at home.

While going through the enrollment process, Lisa reassured Leslie that they would manage her medications - and offer any pain medicines or anti-depressants or anxiety drugs that might be helpful. She said they even had a clinical psychiatrist and a spiritual advisor to help her through this if she would like to talk to someone about any of her concerns. Leslie’s reply was, “I think I’m good,” and added that she was not in pain, depressed, or anxious in any way. “I’ve had a good life,” she said. It was amazing that she seemed to be completely at peace - no fear, distress, or despair about what was happening and what the near future held for her.
Christmas week

Over the weekend before Christmas, Leslie was feeling pretty good. She was still eating well and then would be back asleep in her recliner for much of the time - mostly out of boredom, I suspected. She was pretty alert and engaged when she was awake, but just didn’t have much energy. After a good breakfast on Monday, she again slept for nearly the entire morning. But then when she awoke, she was very lethargic. And for the rest of the day she was essentially non-communicative. She said very little – and did not always even respond when I talked with her. I wasn’t sure if she even understood me when I talked with her. She wasn’t very interested in eating and slept through much of the afternoon. I suspected that she had had a seizure again that blocked her neural functions which would have an effect on everything - leaving her so lethargic, language impaired, and with little control. But I didn’t know. Leslie had very little leg strength or control that evening so it was very difficult to get her into her wheelchair and then to get her ready and into bed.

Then after a rough night on Monday, Leslie didn’t even awaken until fairly late Tuesday morning. I was very worried about her and called her hospice nurse Lisa to tell her about the difficulties she was having. Lisa said to just let her rest and that she would be over later to see her - and then she added that maybe it was time to have a hospital bed delivered to make it much easier for her, since moving her around had become so difficult. So except for bringing her some breakfast and helping her with it, I didn’t even try to wake her or get her up until Lisa came late morning.

Leslie seemed very relaxed with Lisa there, knowing she was there to help. A hospital bed was delivered and set up in the living room - and Leslie seemed to be very comfortable after being moved into it. I tried to make her environment as nice as I could. The living room blinds were open, so there was a lot of natural light in the room, as well as giving a view of the front garden. The bed was set up so that she could see the television, although she didn’t seem to have a lot of interest in watching. I kept some light classical music playing in the background. So her world was now the living room – in a hospital bed, and I was pretty sure she would not get up again. I thought that she might object to being there full time thinking she would still want to return to her bedroom - her sanctuary - since that had always been her routine. But I think she recognized that it had just become too difficult. She actually seemed to feel much better in her new digs, especially after Julia, her hospice aide, gave her a very nice bath and massage and put lotion on her fragile skin. Although it hadn’t been very cold for December, it was also nice to have the fireplace - I think she liked having it. She just seemed very comfortable.

She seemed to feel pretty good and liked being in the living room, but was quite weak. She still ate well and looked forward to her meals. But I think her first night in the hospital bed was not the best for her as she just lay awake much of the time - maybe because it seemed so unfamiliar to her. I was staying in the living room as well - on the sofa - so I could watch her and be available if she needed me. I so wanted to make it better for her, but didn’t know what would help. I just wished she could have let me know what she was thinking and feeling - and if she needed anything. I’m sure she was aware of what was happening - and her wakefulness may have just been about that, but I will never know. After being awake much of Tuesday night, she slept most of the day Wednesday, although seemed to feel okay. She did not have any pain or discomfort - not even any headaches, although didn’t much like being moved around in bed. She was completely unable to get out of bed - and didn’t seem to mind. She had mostly lost her voice as well and just whispered when she tried to say something. She still understood whatever was said to her and responded to questions just by nodding. And she still looked forward to her meals - although needed my help with them.
Leslie had been having a lot of visitors – mostly just short visits, which was probably a good thing. I think she liked having people stop by and enjoyed the company. And even though she couldn’t really carry on a conversation, she seemed to really like seeing her friends and having them visit and certainly enjoyed what they had to say - and was responsive to them. Sophia emailed some very nice comments after coming by to just visit with her awhile (and she brought food as well!):

_I count myself lucky to have been the one that was chosen to take on Leslie's speech therapy many months ago. She is such a vibrant, gracious, beautiful person and even in the midst of what she is facing now, it shines through. In my 18 years of practice, there are only a handful of "patients" that I now think of as friends. I consider you both just that. _Love, Sophia_

Thursday was about the same. She hadn’t slept well again Wednesday night - just lying awake much of the time - maybe because she had already slept most of the day. But she seemed to feel okay on Thursday. Julia came mid-day to bathe and massage her, put her in a nice fresh gown, etc.. I noticed some lower leg discoloration – and especially a lot of tiny spots. Julia said that was just part of the process, her heart was having some difficulty pumping blood to the extremities. The discoloration and spotting would likely continue up her leg, she said. She added that she thought “it might be soon”. Leslie seemed to be a bit fidgety, but didn’t seem to be in any pain. Her right hand was fairly swollen again, so I massaged her arm to increase circulation and bring down the swelling. But she just wasn’t connecting well most of the day.

Leslie slept soundly Thursday night (three days before Christmas) – I think without moving at all - the first time she had slept through the night in the living room. In fact, I was pretty worried as she had been so lethargic the day before. But she awoke Friday about as alert and bright-eyed as I had seen her in quite awhile. Although she still just whispered, she was quite animated, even joking some – obviously feeling much better. She napped some during the day, but seemed to feel fine. She ate well all day - always brightening up when I ask her if I could get her some applesauce or juice or something. Lisa came and seemed to be very pleased with how she was doing and how comfortable she seemed. Lynn came late in the afternoon as well just to visit (and bring Christmas cookies!). It was a good day – I think Leslie enjoyed it and I was pretty relieved, having feared that she was declining very rapidly. And I certainly wanted her to be able to see both Jamie and Ruthie again on their visits over the next couple of days.

**Christmas Eve Day**

But Leslie had a rough morning on Saturday. She was again very lethargic and non-communicative – all so different than just the day before. She was not in any pain, but squirmed some in bed - and never seemed to get comfortable. She did eat a little breakfast. Then by mid-morning, she started coughing and was having some increased difficulty breathing. Her lungs seemed to be congested, including some rattling sounds and difficulty breathing. I called Lisa, who said to give her a small dose of morphine, as that would help with the congestion, and some Ativan to help her relax. That seemed to help and she was breathing more easily afterward.

She finally fell asleep in the early afternoon after her rough morning – and seemed to be resting pretty well. She was less congested and her breathing was not nearly as difficult as it was earlier in the day. And she then slept all afternoon. I was hoping she would just stay asleep and then be more rested when she awoke the next morning. I thought this may just be her systems beginning to shut down. Jamie came in from San Francisco in the evening - and just sat and talked with her, his chair pulled close to her bed. She was awake for him and his talking with her seemed to help her relax and I’m sure she very much enjoyed his being there.
Christmas Day

After sleeping well through the night without any obvious distress, Leslie awoke on Christmas looking a bit more rested and comfortable, and without any of the breathing difficulties. But she was still non-communicative. She spent the morning in and out of sleep, but did not appear to be in any pain or discomfort. She did finally eat some (applesauce, jello, and some yogurt). It was not a lot – but she seemed to enjoy it. I wasn’t sure how easy it was for her to swallow – hence the food choices. I started to be concerned that she had not taken any of her medications, although I couldn’t see that it could possibly matter a lot. But I wanted her to at least take the Decadron and Lyrica that were prescribed, as they both can help prevent seizures. I would try for that the next day.

The day after Christmas, started about the same. She woke up early, had a few sips of apple juice and a little applesauce and seemed to like that. Then she was back asleep. She slept most of the day with intermittent periods where she would awaken for twenty or thirty minutes. She ate more applesauce, jello, and some yogurt during the day. And I was able to get her important meds down by powdering them and putting them in her food! She seemed to be comfortable most of the time. But she was not communicating at all, mostly staring straight ahead, but seemed to know when I was there talking to her or holding her hand. Jamie came again in the evening and that obviously cheered her up. She seemed to very much enjoy having him here. And she then slept well after.

Hi Bill - I just thought I should give you an update on Leslie. She has continued to decline this past week. She has not regained the stamina we were hoping for after suspending the aggressive treatment. She has actually felt okay, but is quite weak and sleeps most of the time. We are still impressed with the care she is getting from the home hospice people. She has been eating pretty well (until yesterday) and sleeping well (and most of the time), and has seemed to be pretty comfortable with everything. These last few days have been more difficult for her, however - so I’m not sure what is next. On Wednesday and Thursday, she was very lethargic - and pretty non-communicative. Then after a long night's sleep Thursday, she awoke Friday with much of the same spark she has had through all of this - wide-eyed, alert, engaged - even though her language is so compromised (and she is just speaking in whispers now - not sure what that means). She was much better all day Friday than during the previous few days. Then yesterday was very difficult for her again - with lots of lung congestion, blank stares, essentially no communication, etc. - and I thought she might simply be shutting down. She slept all of yesterday and last night - didn't eat or drink anything. But today, she woke up for awhile, seemed to be much more comfortable and rested. But I am not sure she has a lot of time left.

I've had a lot of time to think about what it will be like being without her. Yet, I still do not have any sense what it will actually be like. But what has happened in the time I've had to think, is that I have celebrated this life we have had together - the things we have done - in ways I might not not had it all been something very sudden. For example, I've assembled photos of things we've done together - all those trips, etc. - as a way to remember those great times. I've also been relishing the emails and comments from her many friends (who are now also my friends) these last few months as they have told me how important she has been in their lives. All of that has made this a bit easier, I think, because it is a celebration of her life in a way. I have done a lot of writing - a journal of the last twenty months - a record of all that has happened, how to interpret it, and how it has affected us. And in an odd way, that has also given me a way to cope with all of this in addition to just being a medical record. She has said she doesn't want a memorial service - and I certainly understand that. And I don't think it would offer any more closure for me than the reflecting I have already done and will continue to do. I just hope others find their own closure in the absence of a memorial.

Tuesday was a much better day – kind of like the previous Friday, she was much more alert and focused and even communicative. She ate pretty well (again, applesauce and yogurt) and drank several glasses of apple juice. She had visits from Colleen, Julia, and Lisa – and seemed to be enjoying the attention. Her pulse oxygen level was lowish (92%) and her pulse was elevated, all indicating she was having breathing difficulty. But she was just much more animated than the
previous few days. By the evening, she was getting tired, but even watched a little television while slowly having a soft food dinner. Then her childhood friend Ruthie arrived about 8pm - after driving all the way down from Arcata. Leslie wasn’t very alert after such a long day, but she certainly knew Ruthie and was definitely glad to see her dear friend. She again started having some difficult breathing – so I gave her a small dose of morphine to help.

Hi Wendi,

We are doing okay. Leslie was so lethargic for three days, slept most of the time, barely ate and took very little liquid and was essentially non-communicative. I was pretty worried that she was just shutting down. Then she perked up last night when Jamie was here - and was responsive enough that we knew she was aware and was understanding us. Then today was another very good day. She was pretty alert most of the day, seemed to be comfortable, was eating well, had visitors and obviously enjoyed the company, was much more communicative all day, etc. Colleen came over for awhile in the morning, both her hospice RN (Lisa) and the home health aide (Julia) were each here as well. She did nap some in the afternoon, but just didn't seem to be nearly as lethargic as she has been. She even watched a little television after dinner for the first time in nearly a week. Then her childhood friend Ruthie - from Arcata - came in this evening. So it was a busy day, but also very good - and she is now soundly asleep. She might be pretty tired tomorrow, but today was a good day.

Jamie was here for awhile both Sunday and Monday evenings - then went back today. It was great to see him and he was able to spend some time sitting and talking with his mom and he and I had a chance to talk for awhile as well. (I know it was hard on him to see her like that, but he was so good with her and she liked that - and it could be why she felt so much better today!) And Ruth will spend some time over here tomorrow - and that will be nice for them both.

Wednesday began even better than the day before. Leslie was alert, bright-eyed, conversant (in whispers), and had a good breakfast before dozing off again – probably still tired from the activities of the previous day. She then slept the entire day until well after dinner-time when she finally awakened. Ruthie had spent the entire day here with her while she slept - and the two of them visited after she awoke. Ruth helped her with some juice, then applesauce, yogurt, and jello. It was so very touching to watch these two friends of sixty years together. Leslie was quite responsive as Ruth was recalling stories from their youth and about their teenage adventures. She was clearly enjoying the visit! At one point Ruthie said, “We sure had lot’s of fun”, and Leslie responded in a forced whisper, “We had fun.” (Probably her last sentence.) Then she slept well all night.

Best friends for sixty years.  “We had fun.”
After a good night’s sleep, Thursday began just fine. Leslie awoke rested and was very hungry so had breakfast right away. Then Ruthie stopped by one last time to say goodbye before starting her long drive back to Arcata. But about 10 am, soon after Ruth left, Leslie got very congested. I thought it might just be from becoming so teary when Ruth left, knowing that would be the last time they would see each other. (And I’m certain Ruth’s drive north was a very tearful one as well.) But the congestion seemed to be getting more severe as the morning went on, so I gave her a small dose of morphine. But it continued to get worse, with lots of drainage and coughing – she was pretty miserable. I talked with her nurse Lisa who said it was okay to just continue giving her morphine periodically to try to relieve the bronchial congestion - that it should help. Turning her a little on her side also seemed to help some, although she didn’t much like being moved around.

After visits by both Lisa and Julia, Leslie seemed to be resting a little better – but her breathing was still quite labored. Her BP was okay, but her pulse-oxygen level was extremely low (54%) – down from 92% only two days earlier - a very clear sign that all of her systems were shutting down. She was to be given morphine every two hours along with a drop of Atropine to help make breathing a bit easier. Both drugs help relax the muscles, dry out her bronchial tubes some, and open her capillaries to better oxygenate her blood. Lisa expected that she would sleep more or less continuously at that point, although may have some days – or parts of them – where she was more alert. She said she expected that it might be at most only another week – but probably much less.

It was a wonderful - yet tearful - visit with Wendi that Thursday afternoon. Wendi loved Leslie so much (and it was certainly mutual). Wendi referred to her as her very best friend, an incredible teacher and a person who made others around her better. She said that she felt that Leslie had touched so many lives - yet never knew the impact she had on others. I couldn’t have agreed with her more. Leslie’s eyes filled with tears after Wendi left. (And seeing that was very hard for me as well.)

The breathing continued to be difficult into the night. I gave her some morphine and atropine every two hours hoping it would clear up the breathing so it would not be so difficult for her. She was working so hard just to breathe. I wasn’t sure the meds helped much at that point. I was also sure this could not continue very long, as it took so much work for each breath. Friday was more of the same, although perhaps a little easier. She slept all day and had nothing either to eat or drink. I continued with the morphine and atropine to try to keep her bronchial tubes clear. Her breathing varied from fairly even and easy to fairly congested, but it was never as bad as it had been the day before. She did wake up occasionally, but was pretty dopey when awake. But she still seemed to recognize her friends when they came by to see her - and seemed to enjoy that they were there.

Hi Jenny,

I just thought I should bring you up to date on how Leslie is doing. She has been in a hospital bed in our living room for a week and a half now. It is a comfortable and familiar environment for her and she has, for the most part, been doing okay. And, typically, she is both fully understanding and accepting of the situation and seems to be very much at peace. She has been pain-free and medication-free, and until a few days ago, her vital signs were good. But she is now declining quickly and her breathing has become much more labored - with a lot of congestion. The hospice nurse has put her on periodic low dosages of morphine which helps some. But her pulse-ox level has now dropped to 54%, so it appears she is shutting down. The nurse did not think it would be long.

I do want to say how much all of your help through this last twenty months has meant to both of us. It has been very comforting to see how much you all not only cared for her, but also cared about her. Medically, I don't think she could have had better care. But that is also true emotionally - largely because of the very personal connection you all made with her. Thank you all again for all you have done.

– Ron
Dear Ron,

I'm glad things have been relatively smooth and comfortable at home up until the last few days. It does sound like the end is close, and I'm very sorry to hear it. The morphine is a good drug to reduce the feeling of breathlessness and keep someone comfortable if they are not breathing well, so I would fully agree with using it for her given what you're describing. Please know that you are both in our thoughts and prayers. It has been a pleasure and an honor to get to know you both. If anything comes up over the weekend, I am on call through Sunday and would be happy to talk.

Take care, Jenny

Dear Seraphina,

Thank you for your note. And yes, Leslie has had some good moments this last week. Certainly with Jamie, and then with her childhood friend Ruthie. But the last couple of days have been much more difficult for her. She is now sleeping most of the time, her breathing is more labored, and she is no longer either eating or drinking. Her hospice nurse feels sure that her systems are now shutting down. She doesn't seem to be in any discomfort though - except for the difficulty breathing. She still recognizes that I'm there - as well as the friends who have been coming by. So, yes, I think she does still have some good moments. And she seems to be at peace.

~ Ron

Saturday - New Year’s Eve Day

There hadn’t been any change from the day before. Leslie did not seem to be in pain or even be uncomfortable. She was sleeping nearly continuously. Her breathing was still labored and her pulse was quite rapid. Julia, the hospice aide, came by early in the afternoon to attend to her. Julia was wonderful - a middle-aged Latina woman, with only limited English, but so kind and gentle with her as she bathed, massaged, and applied lotion to Leslie’s fragile skin, changed her gown and put fresh linen on her bed. A real artist, I had thought as I watched her. She told me once as she was leaving that she had the best job in the world, being able to help people as she does. Julia said she did not think it would be long now, but that Leslie clearly was not in any pain and except for the breathing, was not even uncomfortable or distressed and didn’t show any sign of even being afraid - she just seemed very relaxed. Julia said that although she was scheduled to return the following Tuesday, she did not think that visit would be necessary. That afternoon, after Julia’s visit, Leslie seemed to be resting pretty well - but was still having some breathing difficulties.

Colleen, who has been one of Leslie’s dearest friends for years - and especially through this entire ordeal, came over to just sit with Leslie, insisting that I get out for a little while since I had probably not even been out of the house for days (she was right about that). It was nice to be outside and getting a little exercise - it was sunny and warm for the end of December, but I worried about how Leslie was doing. I knew, however, that she would like having Colleen there with her.

When I returned, the bronchial congestion had gotten much worse. And it was clear that her poor body would not be able to continue working that hard - just breathing, gasping for every breath, was so difficult for her. Some more morphine helped, and she seemed to calm down a little. Colleen returned home and I just sat with Leslie - feeling a bit guilty that I had been away for part of the afternoon. But then late in the afternoon, the bronchial congestion worsened again. I gave her more morphine along with some atropine, and that again seemed to help. Although her breathing was still somewhat labored, she did not seem to be as distressed. She just slept for another hour or so, breathing heavily as I sat with her. I think she always knew she wasn’t facing this alone.

Then, a few minutes before 6 pm, her body just relaxed, she exhaled deeply, and was gone.
Her poor body just could not keep going, and she passed away peacefully - at home, drug-free without pain or fear, just as she would have wanted it. Would I have wanted her to live longer? Of course. But would I have wanted her to struggle longer just to take another breath? Of course not. Would I have wanted her to stay with us another week, or day, or even another hour? No, not under those circumstances. Because she was finally at peace and not fighting just to take another breath. She was no longer suffering, and her long ordeal was over. We all knew this moment would come - but there still is no way to actually prepare for it.

I called Colleen who quickly returned - and we just sat quietly as she said goodbye to her dear friend. Later in the evening, Colleen came again - I think not wanting to be alone as much as not wanting me to be alone. And our neighbors Wendy and Dean from across the street came over as well and we all sat around and just told Leslie stories. I talked with Jamie a number of times through the evening and called Ruthie, Tony and Carole, Bill, and others. It was late into the night before I notified the hospice people, who in turn notified the mortuary. They were very gentle with her when they came around midnight - and it was clear that they would treat her with respect.

Hi Bill,

Leslie lost her battle this evening and passed away peacefully. She had been having some breathing difficulties the last few days - and late this afternoon it became worse. Then about 6pm, she just relaxed, exhaled deeply, and passed away. So she is no longer suffering - and is finally at peace. We knew it was getting close, so this was not at all unexpected.

The following morning I just sat outside on our front deck on a beautiful January morning - a New Year, contemplating what she had been going through the last twenty months and what life would be like without her. I called her dear friend Wendi, who was traveling that week, with the not unexpected news. It was a call I had really dreaded having to make. I spent the morning outside - and was so touched by the warmth of the people who called and came by.

As Jamie said, it was as if she chose the day and time so that we could all begin the new year with a fresh start.

“Mom, typically, even did this on her own terms – just as she lived life.”

And now she was at peace.

Dear Stephanie,

I just wanted you to know that Leslie lost her battle with cancer Saturday evening - and is no longer suffering. She passed away peacefully at home. The last few days had become more difficult for her. She had been sleeping most of the time, not eating or drinking much, having very labored breathing and other signs that her systems were beginning to shut down. But she never seemed to have any pain or discomfort and did not show any signs of distress or of being frightened, but did have a lot of bronchial congestion late Saturday afternoon making her breathing even more difficult. Then about 6pm, she just relaxed, exhaled deeply and was gone - and is now at peace. And I think she knew it was time. I just thought you should know.

love, Ron
As most of you know, my wife Leslie has been battling an aggressively malignant brain tumor (a glioblastoma multiforme) for about twenty months. She lost that valiant battle New Year's Eve - and is no longer suffering. She passed away peacefully at home.

For those who did not know her, she was very bright and articulate and funny with possibly the best command of our language of anyone I knew. So to have this insidious tumor essentially destroy her left temporal lobe - the brain's language center - seemed very cruel indeed. I can't imagine how frustrating that must have been for her. Over just the last few months it also took her right side vision and then her right-side coordination, strength, and motor control, so in the last two months she could no longer read, or walk, or even work on her quilting - all things that she loved. And that seemed doubly cruel.

She has been absolutely amazing through all of this - with the two major surgeries, radiation therapy, and participation in three different clinical trials through the UCSF Brain Tumor Research Center. That aggressive treatment gave her another year and a half of active life. For most of that time, she remained positive, active, asymptomatic, and enjoying life as best she could - with sense of humor intact. But, alas, there was tumor progression - as is always the case with these aggressive gliomas - which led to the second surgery last summer and two new trial drugs and finally the compromising attack on her systems these last two months. The last few weeks she has been resting at home in a comfortable and familiar environment, drug-free and pain-free - and at peace.

She dealt with all of this with incredible strength, dignity, determination, courage, and grace - and both understood and accepted the inevitable outcome of this awful disease. I have no idea how she handled it so well. And she had no idea of the impact she had on people or the number of lives she touched.

Hi Tony and Carole - Just wanted you to know that things have been going okay here. I am in San Francisco just now - as it is so much easier for me to come here than for Jamie to get away and come home. And I think being here to just hang out some with him has been good for us both.

The outpouring of love for Leslie this past week has been rather amazing, actually - and very comforting. I've heard so many stories from her friends that I had not heard before - things that they remembered about her that they thought were special. I've had a long talk with her local oncologist, Deborah Villa, about her and her incredible strength and attitude throughout this battle. Then Friday, I met with her UCSF team, Jenny Clarke, and the two nurses that had been Leslie's primary support for the last twenty months. And it was rather incredible how they saw her and how much it has saddened them. They were clearly grieving as well as they had become so attached.

Leslie Brown \ October 11, 1945 - December 31, 2011

Claire Leslie Brown (who went by Leslie), 66, passed away peacefully in her home on Sunday, Dec. 31, 2011, losing her 20 month battle with brain cancer. She was a graduate of UC Riverside with a degree in classical languages, worked and volunteered at Sunnyside and Baywood Elementary schools in Los Osos, where she had lived since 1977 with her husband of 43 years. She loved reading, hiking, traveling, doing needlework and quilting with her friends. She remained very active until the last few months and dealt with this illness with great courage and grace.

“You can't control what life gives you, but you can control how you deal with it.”
From some of the cards, emails, and postings to her obituary:

I will miss Leslie very much. She was a very dear friend and a lady that I admired, respected, and loved. She was one of the most intelligent women I ever have known but with an amazing sense of humor! Her courage through her whole ordeal will forever be in my heart and my mind. As a cancer survivor I appreciate the strength it took for her to deal with this disease. What a wonderful lady!

~ Glenda

I also was saddened to hear this news. Leslie was witty and strong. She was always forging ahead and so enjoyed walking and talking through Los Osos with her friend Colleen. What a great attitude she had. What a loss for her friends and family.

~ Barb

I was so sorry to hear of the passing of Leslie. I'll always remember her sense of humor, strong will power, and her positive attitude. I'll also remember our church activities and the bridge dinner group - some very happy times. Best wishes to Ron and Jamie.

~ Kay

Leslie will always be a spark of life to me. She inspired me with her dedication to walking and reading. She could always let me know of the best new books to read.

~ Liz

I had the honor to meet Leslie during her illness, as a help to her for speech therapy. From my very first visit to my last, though many words eluded her, she always managed to find a way to convey her deep thoughts in a unique, profound, and always humorous way. She was a beautiful person. I will miss her!

~ Sophia

Hope the tears and sadness are soon replaced by laughter and smiles as you recall the special lives the two of you shared and the incredible lady that you married. She was so full of life till the very end!

~ Lynn

Leslie was one of the first people I met when we settled in Los Osos in 1978. I phoned her about some matter regarding Sunnyside School, and we ended up talking and laughing for over an hour! That one phone call made me feel that we had made the right move. She was one of the most intelligent and warmest people I have ever known, and when I think of her, I remember the laugh that was always in her voice. This world has lost a wonderful soul.

~ Kathy

Leslie became a very dear friend through our weekly Wednesday quilting. The four of us had such great times together. Our hearts are heavy now and we are still adjusting to being a group of three. There is a hole in each of our hearts. We all think of her often and memories of her continue to be part of our conversations. Her embroidery, applique, and quilts brought joy to many.

~ Kathi
Leslie, from what I’ve learned from your reports over this trying time, was unquestionably a rara avis—a remarkable and evolved human being. Truly, her troubles are over, but your’s aren’t and I’ll keep you in my thoughts and hope for your expeditious return to a semblance of normalcy, ‘tho I know it will be a grief-filled slog. Life will out; and you’ve got the blessing of the rest of your family to help you through this wrenching time.

~Tom

I count myself lucky to have been the one that was chosen to take on Leslie's speech therapy many months ago. She is such a vibrant, gracious, beautiful person and even in the midst of what she faced, it shone through. In my 18 years of practice, there are only a handful of "patients" that I now think of as friends. I consider you both just that.

I know we have spent a lot of time talking about your beautiful Leslie and how lucky we all were to have known her, but she was lucky to have you too! I hope these next few days find you getting the rest and care you need and deserve.

I know you didn’t need anyone to convince you of how special Leslie was, but I would imagine how nice it is to hear over and over again of her unique qualities and ways she has touched the lives of others. I know that is a comfort to you.

~ Sophia

Words can’t express how very sorry I am for your loss. That Leslie passed on pain free and at peace is so nice to hear (although it doesn’t surprise me given the women she was and life she lived both before and during all this). And you are absolutely correct in the impact she also had on many. Her courage and attitude in the face this is something I know I’ll never forget. What an incredible inspiration. I must say that the notes and conversations about Leslie come as no surprise...what an incredible, incredible woman and so deserving of so much praise and love. The obituary is also very nice..."great courage and grace"…how completely accurate.

~ Stephanie

I met Leslie in the summer of 1962. It was a great summer. Leslie was such fun – smart and funny with a hint of sarcasm and cynicism. I only saw her one more time, at Ruthie’s wedding in 1965, but have remembered her fondly all these years. My memories of Leslie always make me smile.

~ Susan

I learned so much from her. I truly believe she helped build the teacher I am today. I think back on the hours of time we wrestled with every challenge we educators are handed throughout the day - from challenging students to pesky computer issues to curricular choices and the philosophical machinations of each. So many discussions within school are about the little stuff. With Leslie, and you, I have been able to discuss the big stuff as well. She was one of the smartest people I know.

~ Wendi

I am so terribly sorry to hear the news about Leslie. Never having gotten to know her is indeed my loss. It sounds as if she was truly an amazing human being and she was truly courageous in facing such a terrible disease. I am grateful that her suffering is over and she is now at peace. I know that the suffering goes on for you and that you have lost an irreplaceable part of your life.

~ John
I'm so sad to learn of Leslie's passing. I always looked forward to seeing her and talking with her. She always brightened my day. The world is a smaller place without her.

~ Sally

Leslie had such a wonderful spirit and truly touched so many of us.

~ Dustin

My deepest, deepest sympathy to you. I'm very sad to hear this news. I truly enjoyed the few times that I met Leslie and I know from them and from you just how amazing a woman she was. I'm glad that her suffering is over, you both fought so hard. You have mentioned several times to me how well she handled her struggle. I know that having you by her side must have been a large part of why...I wish I had more words right now, but times like these seem to dry them up.

~ Jamie Orr (a former student)

It's hard to understand why Leslie, who had such a zest for life, could be struck by such an insidious disease. We will remember her as the cheerful, enthusiastic, upbeat person with whom we often conversed about your trips and the latest news of our kids. Leslie will be greatly missed.

We hope as time goes by, all the good memories of your lives together will bring you comfort.

~ Sue and Myron

It's amazing how many times a day I think of her and either smile or ache or both. She certainly was a powerful presence and friend.

What an exceptional woman we had the honor to know and love!

~ Wendi

I feel privileged to have known about the wonderful love story that was (is) yours and Leslie's. She was convinced (rightly so, I know) that you believed that she hung the moon. She always knew she was loved by you in such a big way and that you always had her best interests at heart. Your last 20 months together gave her continuous reminders of your devotion. On her part she felt sooo fortunate to have found her perfect husband in you and when she talked about you or was with you it was obvious to me that she thought YOU hung the moon. You two sure did marriage well!

~ Colleen

Leslie certainly set the bar very high for the rest of us.

~ Seraphina

You lucky bastard! You got to live with that woman for forty-three years!

~ Joe (one of the “children people” of the 540 Club)

No matter how many doors slam in your face, another one will always open for you.

We are so sorry for your loss. Mrs. Brown was a wonderful person. We hope your spirits will be held high by your friends, family, and neighbors.

Love, Clea and Maddy

[On a home-made card from 11 year-old Clea, who lived across the street, and her friend Maddy - left on my doorstep the following morning.]
And from the amazing people at UCSF - the neuro-oncologist in charge of Leslie’s care, and the Brain Tumor Research Center nurses who worked with her for nearly twenty months through it all:

Ron - It has been a pleasure and an honor to know both you and Leslie for what was - for her - too brief a time. Please know you are and always will be part of our family here at UCSF.

~Jenny

We think of Leslie often and appreciate you keeping in touch with us. I hope your memories of your time together brings you peace. You are in my thoughts.

~Jane

I feel so privileged to have be a part of Leslie’s care, to get to know you both. She was a beautiful person. Thank you so much for sharing the slide show with us.

~Emilia

Ron - It has been an honor to work with you and Leslie. God bless your life ahead.

~Angelica

Ron, I feel so honored to have participated in Leslie’s care, and so lucky to have been here last Friday to see you and the beautiful slide show. She was remarkable. You are remarkable! I hope you find comfort in your memories of times together. You are in my thoughts.

~Margaretta

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Thank you all for these wonderful comments and tributes to Leslie. She had been through so much - and had handled it all so amazingly well, understanding it all and accepting it all - with her incredible sense of humor intact. I don’t think she ever knew how much she impacted others with her wit (in all the meanings of the word) and then with her courage in how she faced this over the last twenty months.

She was lucky, in a very odd way, for the quality of her care through it all - from the UCSF medical team to her local docs and the home-health people who worked with her over the last five months with physical and speech therapy (and became good friends to us both in the process) and to the hospice people who were wonderful with her. She remained remarkably asymptomatic through much of the time and was active and enjoyed life. She showed us how to live life while facing this.

She so loved her friends and how all of you continually supported her and accepted her and enjoyed being with her - and that helped her tremendously and she cherished that time with you.

For the most part, what drives us is that we want our lives and what we do with our lives to matter. And one of our biggest fears is that we will not be remembered. Leslie’s life mattered. She had impact on others in ways she never knew. And she will be remembered in ways she never expected.

~Ron
Postscript

I don't think either of us ever doubted how we felt about each other. But like many couples, we probably spent much of our lives just doing our own thing, often independently - even taking each other for granted much too often. After those first two language episodes - leading to her diagnosis, I think we became closer than ever. I certainly felt my role was to do whatever I could to make her life easier - and her treatment as successful as possible. But I think she also felt her role was to try to make the rest of our lives easier as well - since we all had to deal with all this in one way or another.

Over her last six months or so, I had assembled a collection of photos - first of our hiking adventures in such special places as the Grand Tetons, the North Cascades, Utah’s Canyonlands, and the Canadian Rockies - just as a reminder of the things we did on those summer trailer camping trips. It grew to include pictures of our early lives together, while in college, as young marrieds, her joy of being a mother, as well as photos taken of things we did during those last twenty months. This photo montage has become an important way for me to remember who she was.

Leslie did not want a service of any kind - so it was a wonderful event in early March, a potluck dinner party for some of her closest and most cherished friends - her quilting friends, her teacher friends, her neighbor friends, and even her childhood friend Ruthie, who came down from Arcata just to be a part of this - to put closure, in a way, on their sixty year friendship that began in kindergarten. Everyone there either already knew each other or knew of each other from the stories they had heard from Leslie. And Jamie was able to come as well - and enjoyed finally meeting the people whom he had heard his mom talk about as well as those he knew from his childhood. Everyone invited - and it was intentionally a small group - was there. And it was comforting to me to hear the wonderful things said and the stories told by these amazing and talented people. Leslie would have loved the party - although would have been embarrassed by the attention and adoration that was paid to her. It was a special night in so many ways. Joe, Jill’s husband, later said so much when he said the best thing about the evening was the slideshow put together to chronicle her life - then added that it was also the worst thing about the evening. I think everyone there was touched by the event.

Time heals everything ... or so they say. Six months later.

Maybe. It is hard to know for sure. I still ache when I think of her and what she went through - and that may never change. There is some sense of guilt, I think, that I have a life to live, but hers is gone. I get to enjoy things - many of which we once enjoyed together, but she does not. There is even a little guilt as well that my life is now easier than it was when taking care of her. And yet I miss taking care of her. I came home one Winter evening much later than I had expected and had not left a light on - and I found myself apologizing out loud to her picture when I walked into the dark house. Although funny, in an odd way it somehow speaks to how responsible I felt for her well-being throughout that twenty months. It was the hardest thing I ever did - and the most important as well.

Anniversaries are more difficult than I would have thought. And I often remind myself of where we were a year or two earlier. So she is every bit a part of my life now as much as ever - even though I am doing a lot, going a lot, trying to fill my life with things that are fun and meaningful.

Leslie was my life for forty three years - so I will not avoid things that remind me of her. In fact, I know that would be impossible anyway. She is everywhere in our house - and that is the way I want it. I even talk with her some - and often wonder what she would have thought about one thing or another. It is bittersweet when I do those things that we used to do together - since doing them reminds me of her, but that also means I’m reminded that she is no longer here to enjoy them.
Jenny Clarke and I have become good friends. When I am in San Francisco to see Jamie, she and I often try to get together for coffee. Jenny meant so much to Leslie, and held our respect so, and I find it helpful to see her - and applaud the amazing and difficult work that they do. I would be happy to play some role in supporting the work being done through the Brain Tumor Research Center if it would benefit others going through what Leslie went through - even if it is just to communicate what I learned about how to deal with this from a family member’s perspective. Even that would be a tribute to Leslie. I also try to see Seraphina when in the City as well, since she now lives in Mill Valley. I’ve known her since she was a freshman at the university, and Leslie had essentially become her surrogate mom after she lost her own mother to cancer.

My other former student Stephanie, whom Leslie never met but felt like she knew from my telling, got married in July of 2012. We both thought of Stephanie almost as a member of our family. When her save-the-date wedding announcement came the previous October and I showed it to Leslie, she was excited saying “I won’t be able to make it, but you have to go.” So in July, I took a road trip to Colorado - in the new car I bought in February. (It is exactly what Leslie would have insisted I buy - it was even the color she kept pointing to on our trips to SF for treatments, and with all the techie features she would have loved. “You’re only going to buy one - get one with everything you want,” she had said.) In a way, the trip mirrored the first trip we ever took. It was our first full summer as a married couple in 1969, in our then brand new Porsche. We took a road trip to Colorado to see Ruthie prior to the birth of her first child, forty-four years earlier.

It was different traveling alone. But with the memories of our previous adventures, I wasn’t really alone. Traveling through Las Vegas brought up the first time we were there together - on July 20 of that first summer’s trip, the night of the first manned moon landing - traveling across the desert illuminated by the full moon in full view, knowing there were humans up there. Going into Zion Canyon reminded me of the spectacular hikes we took there as well - to Angels’ Landing and Observation Point, two steep climbs leading to spectacular views high above Zion Canyon, and the walk up the Virgin River narrows. I thought of her so much along the way and miss hiking with her.

But the best (and in way the worst) was in Canyonlands. We had done a number of long hikes there over the years, in the Island in the Sun and Needles districts as well as Horseshoe Canyon and the Grand Gallery in the western region of the park. But our favorite views, I think, were still along the Grand Overlook trail. A short hike by hiking standards, but with the spectacular expanse of Canyonlands before us, cut by the Colorado and Green Rivers. So returning there was both wonderful and thought provoking. Leslie loved everything about Canyonlands - the dry heat, the incredible beauty, the vastness, the sheer magnitude of it all - and, of course, the solitude. So it seemed only appropriate that she make one more trip to this amazing place. I sat at the point of the Grand Overlook and just looked at the scene before me - as we both had done many times before. It was cathartic, in a way - and I said a short prayer as the wind took some of her ashes - “Godspeed, my love.”

I like recalling the things we did - and it is even exciting, in a way, to do them again. But as I said, it is also bittersweet, because I know I will never be able to share them with her. I think she would like to know that I was going back - and remembering. And I think she would approve of the attempt to recapture some of our favorite times. I know that she worried that I would not continue living life. But if I learned anything from the last two years, it is that life is to be lived as best one can regardless of the circumstances. As Leslie would often say, “You can’t control what life gives you, but you can control how you deal with it.”

That is her legacy.
Her work lives on

Quilting had become her passion. Leslie enjoyed quietly working on her projects in her studio in the afternoons or while watching television after dinner. And she loved getting together with her quilting group - Carole, Kathi, and Jill - every Wednesday. They would sew, and talk, and go out to lunch, and just spend the day together enjoying each other’s company. Even after she was somewhat compromised visually and even physically, it was still important to her to get together with them.

But it seemed that she liked quilt projects more than she liked finishing quilts - in that she loved to plan a quilt, lay out the fabrics, work on the squares, do hand piecing and her amazing fine handwork, but then often neatly put the quilt tops away without turning them into finished quilts - I suspect thinking there would be lots of time for that. So I will be forever thankful that her quilting friends had taken on the task of finishing some of those projects. Those finished quilts have now been returned - and it means so much to me to have them on display here at home where they belong.

From Jill: “I am so glad Carole, Kathi and I took some of Leslie’s quilts to finish. It has kept her close to us as well as giving us the opportunity to admire her beautiful handwork.” And from Kathi: “It was an honor to finish those quilts. Like many quilters, when we are working on a project for a specific person, they are in our thoughts as we work. I feel close to Leslie when I work on her quilts. You thanked us by sharing them with others. It makes me feel like our work on her quilts was good enough to share. It is a huge responsibility to finish her quilts to the high level she set in her hand and machine work.”

So it was also so very special for me to have these wonderful friends enter some of those finished pieces in the Seven Sisters Quilt Show - to put them on display for others to see her work - three years after that morning in April of 2010, when after helping set up the show, Leslie then had that first unrecognized episode with language indicating that there was a problem.

In a quiet moment at the 2013 quilt show, Jill looked at two of Leslie’s quilts (which Carole and Kathi had finished) – remembering Leslie and the times they had all spent together.

It has now been five years since Leslie passed away. I have done a lot in that time, kept busy, travelled, hiked in the Canadian Rockies and the Grand Tetons, taught again at the university, played a lot of golf, have gotten together with friends and with Jamie, and even made new friends. Leslie worried about how Jamie and I would handle this - and I think she would be pleased that we talk often, spend a lot of time together, play golf, and have even travelled together. I think we both cherish the time we spend together. And yet, it still seems like just yesterday that I lost her. I’m doing okay - depending on what one means by “okay”. I’m doing well, even, by most standards I guess. I still look back at what was going on during that twenty months - and marvel at how she handled it all with such strength and courage and grace. She certainly knew what was happening - and the inevitability of it. And yet her spirit never seemed to wane - even as her life could no longer sustain itself.

As Seraphina said, “Leslie certainly set the bar very high for the rest of us.”
Epilogue

I miss Leslie. I miss her laugh - and making her laugh. I miss her intelligence. I miss her incredible sense of humor and of whimsey, her wit (in every meaning of the word) - and her insights and logic and that touch of cynicism. I miss our conversations and our hikes and travels together. I miss how honest she was - how she could see through an inconsistent argument or inconsistent behavior and was never reluctant to point it out. I miss her help - especially in dealing with some intellectual or social or educational dilemma, or about the correct use of language. I miss our trips - to those grand places like the Canadian Rockies or Canyonlands, but also to the store or to town or to walk the Bob Jones trail or the bluffs at Montano de Oro - just to have an outing. I miss lunches out with her - at Gus’s Grocery, for example, which I think was her favorite. I miss how she cared so much - about everything - about her very dear friends, about Jamie and about me. I miss her commitment to helping others and making things better for them and how concerned she could be about whether she might have hurt someone’s feelings. I miss how unassuming she was - even to the extent of never giving herself credit for the amazing things she could do - her intelligence and her abilities. I miss seeing her immerse herself in her work - her quilting, her organization, her schoolwork, her household book-keeping or her quilt guild work, whatever it was that she got involved in was important enough to do it well - and she always wanted to do it well. I miss our trips to San Francisco together - those long drives with nothing to do but talk - even though we both understood the reason we were making those trips. I miss our Crissy Field walks to the Warming Hut - and hamburgers at Barney’s. I even miss taking care of her - and making her comfortable, keeping the world at bay and protecting her from worry.

“Take care of your memories, for you cannot relive them.” - Bob Dylan
This was written as a tribute to Leslie’s strength and courage throughout this ordeal and is based on the extensive journal I kept (initially for medical reasons - then as a way to remember). There were many triumphs along the way - as well as many issues, concerns, struggles, and disappointments. I hope that I have been able to convey how she dealt with it all.

It has now been five years since she lost her battle to this insidious disease. I have been doing okay ... I think. Writing this has given me a chance to reflect not only on the twenty month battle with cancer and how she handled it all with such courage and grace, but also on what my role was and how I have continued to deal with her loss.

The emails I’ve included in this piece - to my brother, who was particularly interested in the language aspect of all of this, and to others who knew her and wanted to be kept informed - were updates on what was happening at the time. By themselves, they tell the story of her journey, both the triumphs and the struggles.

The photo montage at the end includes some of the pictures that I had put together to celebrate her life. Each of the images holds a special meaning to me and they are intended to show a little of who she was. That last picture, for example, was taken just twelve days after her second major brain surgery - in a San Francisco restaurant - a testament to her amazing spirit. No one seeing her that day would ever have guessed what she had just been through … or was facing. The ring she is wearing on that chain was from our son Jamie - inscribed continuously without beginning or end with the inscription “...onandonandonandonandonand...”. A sign of the hope we held for her.

I have stayed in contact with Jenny Clarke as well as others at the Brain Tumor Research Center. I participated in UCSF’s first Caregiver’s Conference focusing on the unique challenges of caregiving for adults with brain disease and put together a piece on what I felt was helpful during that time. I hope that I can continue to be a part of their endeavors to make the journeys of those who are now dealing with this - and their families - a bit easier.

And finally, many thanks to those who have read earlier versions of this, and have made important suggestions - including our son Jamie, for whom reading this could not have been easy.

Ron Brown  
December 2016

Leslie’s Journey:  http://www.calpoly.edu/~rbrown/JOURNEY.pdf


Five Years:  http://www.calpoly.edu/~rbrown/FiveYears.pdf
A followup on what I have done since she lost her battle with cancer.

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