

Cancer

There may be no more frightening diagnosis to hear for a friend or family member — human or animal — than cancer. Though there are veterinary oncologists in many major cities across the country, few have experience treating rabbits. The few documented cases of cancer treatment in rabbits have perhaps resulted in prolonging life, but not in curing the disease. However, if we assume that cancer in rabbits is a death sentence, no progress can be made in discovering viable treatments and, hopefully, some day a cure.

If your rabbit is diagnosed with cancer, you have three options:

- Fight the disease as aggressively as possible while preserving his quality of life. Even if you choose this option, you need to realize that your rabbit will probably ultimately die. However, aggressive treatment can buy you several precious months or even years with your friend and your efforts may help other rabbits in the future.
- Make the rabbit as comfortable as possible, without aggressive treatment, and euthanize when he can no longer be kept comfortable.
- Euthanize the rabbit immediately.

Some questions to consider before choosing the first option:

- **Does your rabbit want to live?** This is the most critical point to consider. If the prognosis is poor and, in your heart, you feel your rabbit is ready to go, it is probably selfish to try to keep him alive. However, even if the prognosis is poor, if you believe your rabbit wants to live, don't give up right away.
- **Do you have a skilled and trusted veterinarian who is devoted to helping your rabbit?** This is also a critical point. You obviously cannot do this alone. Your veterinarian need not have experience treating cancer in rabbits — or any other species. What she does need to have is a solid understanding of rabbit medicine, a willingness to consult with specialists to help identify and select treatment options, and an ability to work as part of a treatment team.
- **Do you have the resources to fight for your rabbit's life?** Fighting cancer is expensive. Caring for a critically ill rabbit requires tremendous physical and emotional energy. If you are unwilling or unable to devote a large portion of your life to your rabbit during the battle, perhaps it is best not to try. If family members are going to resent the amount of money, time, and energy this battle requires, you face a difficult choice. Remember, if you and your rabbit are going to fight the cancer, your rabbit needs to know he has your unconditional love and support.

What follows is the story of Smokey, a brave bunny who fought cancer for five months. Although the cancer ultimately won, those of us who fought with him did not fail. Smokey had five additional quality months with us — and taught us much about strength, courage, and unconditional love.

Smokey's Story

Smokey was a gray lop who entered our lives and stole our hearts in April 1994. His family was moving and decided not to take him — if we didn't want him, someone who raised rabbits for food would “dispose of” him. When he came to us he was four years old and had been severely neglected. He lived alone in an outdoor hutch. He had horrible malocclusion which no one had noticed. He cowered in the back of his cage and trembled when I held him. Within a month, however, he was chasing me around the back yard! It was such a joy to watch Smokey come out of his shell.

The following February, Smokey developed a stubborn ear infection. He bravely endured nine months of vet visits, antibiotic treatment, and ear flushes before finally being cured. He was a model patient — never fighting his medication and never acting sick. He and I really bonded during those nine months of medication — and Smokey became my first House Rabbit.

On December 4, 1997, Smokey was diagnosed with cancer. He had a huge mass in his mouth. I made it clear that money was not a consideration if there was hope for quality of life; however, I would **not** let him suffer. A year earlier we had watched my father-in-law die of prostate cancer. At the time I had said, “If he were a bunny, we wouldn’t have to let him suffer like this.” Dr. Bradley recommended we try surgery, and euthanize him if that seemed best once she got in there. Before the surgery, I kissed Smokey and told him how much I loved him and wanted him to get better. I also gave him permission to go peacefully.

Dr. Bradley removed as much of the tumor as she could but, sadly, she could not get it all. She was amazed at how well Smokey came through the surgery. She wanted to keep him overnight, but agreed to let him come home. Later I was sure, in my heart, that he would not have survived if I had left him. He would have given up, thinking we had abandoned him. Smokey came home with Baytril® and Prednisone, which he was to be on for the rest of his life.

On the way to pick up Smokey I told my husband, George, “If he doesn’t show an interest in food, we have to let him go.” As soon as we got home, I opened his carrier. Before George could get into the house, Smokey had run — still wobbly from the anesthesia — to his pellets and tried to eat. Of course it was much too soon — roughly four hours after surgery. But it was a wonderful indication of how much he wanted to fight for his life. I set out a saucer of canned pumpkin (one of his favorite foods) and left him to rest.

A couple of hours later he came running — still a bit wobbly — out to the living room to be with his family. I spent much of the evening on the floor next to him and was rewarded with “bunny kisses.” Throughout the evening I syringe fed small amounts of Gatorade to keep him hydrated. Dr. Bradley had told me that I could try syringe feeding canned pumpkin about bedtime. At 10:00 p.m. I sat on the floor next to Smokey with a fresh saucer of pumpkin. I put a small amount on my finger, stuck the finger in his mouth, and watched him eagerly eat the pumpkin. I continued feeding this way until he had eaten about a tablespoon. Twice during the night I got up and “hand-fed” more pumpkin.

The day after Smokey’s surgery George and I took him back to learn how to give fluids. For Smokey, I overcame a lifelong fear of needles. The biopsy results came in later that day, confirming our worst fears. Smokey had a spindle cell carcinoma — very aggressive and fast-growing. After consulting with the local specialists, one of the country’s top rabbit specialists, and a veterinary oncologist in California who had worked with rabbits before specializing in oncology, Dr. Bradley recommended chemotherapy with Doxyrubicin, with treatments planned at four-week intervals. She was very open about the risks. The drug was known to have cardiotoxicity side-effects, and this effect was known to be cumulative. This meant that Smokey might die during the treatment itself — and that the risk increased with each subsequent treatment. By the fifth or sixth dose, death was likely. However, Dr. Bradley reminded me that if we did nothing he would almost certainly die — and probably soon. Smokey would be anesthetized for chemotherapy, so if death occurred, it would be painless.

The decision to try chemotherapy for Smokey was one of the hardest I have ever made. I’m not sure I would choose to endure chemotherapy myself — how could I even consider subjecting Smokey to it? But he made it clear he wanted to fight — so how could I choose to do nothing? A veterinary student I “met” via e-mail reassured me by explaining that the goals of chemotherapy in human and veterinary medicine

were different: In human medicine the goal is to cure, often at the expense of quality of life, whereas in veterinary medicine the goal is to prolong quality life.

We scheduled Smokey's first treatment for December 12. During the week between surgery and chemotherapy, Smokey was quieter than before surgery but very sociable. He gained strength each day and his appetite was actually better than it had been in months. The night before chemotherapy, Smokey went back to our bedroom and played under the bed — something he hadn't done in months. Once again I wondered if I was doing the right thing.

Dr. Bradley met us at the specialists' office on December 12. She administered the anesthesia and monitored vital signs while the specialist administered the Doxyrubicin. Before they took Smokey away I told him, as I had before surgery, that I knew he was brave and strong and could get through this, but that if he was ready to give up, this would be an easy way for him to go. The Doxyrubicin had to be given very slowly, so it was almost an hour and a half before Smokey was back in my arms, giving me bunny kisses. I don't think I've ever been that scared. Dr. Bradley said he did **great** during the actual treatment but "crashed" coming out of the anesthesia. They got his temperature back up with makeshift hot water bottles made from rubber gloves. Dr. Bradley took him back to the clinic for observation for a few hours.

Smokey showed no ill-effects after chemotherapy. He was a bit quieter and his appetite was down slightly for the first couple of days, but he bounced back quickly. Ten days after chemotherapy — just before Christmas — we took him in for blood work to check for immune-system problems that would make additional chemotherapy inadvisable. The results were good and we scheduled his second chemotherapy for January 9.

By Christmas we had settled into a routine and I couldn't have asked for a better patient. Smokey took his medicines willingly. I had become comfortable giving fluids and Smokey often groomed himself during the process. George and I stayed home as much as possible and when we did go out, we left Smokey loose in the whole house with the TV on for company. Friends and family who visited us over the holidays were amazed at how good he looked. All of them said that you would never guess by looking at him that he was being treated for cancer.

Since Smokey's temperature had dropped sharply after the first treatment, I packed a bag for his January 9 treatment — soft towels, a hot water bottle covered with soft fabric (bunny-shaped, of course), and an instant heat pack. Dr. Bradley had a little more trouble finding a vein this time, but otherwise she felt the treatment had gone better than the first time. We got to bring Smokey home immediately. Dr. Bradley also felt certain that the mass had not grown any and had perhaps even gotten smaller.

Again, Smokey showed no serious side-effects from his chemotherapy. His appetite and energy levels were down slightly for the first few days, but returned quickly. Ten days later when we took Smokey in for blood work some of the immune-system values were down. We decided to wait five weeks for the next chemotherapy and do blood work again first.

On January 27 Smokey suddenly stopped eating. Dr. Bradley saw what looked like an abscess in the mouth along with some regrowth of the tumor. She put him on Septra® along with the Baytril®, had me give Banamine® shots twice a day, and told me to syringe feed as much as possible to put some weight on him. We scheduled surgery for Friday, January 30 to drain the abscess. As always, Smokey was a wonderful patient for those three days. He took the new medication willingly and actually enjoyed being syringe-fed several times a day.

When Dr. Bradley got into Smokey's mouth, she discovered that what had looked like an abscess was

actually food that was caught on the tumor, which was much larger than the first time. This time, however, it had grown across the mouth instead of back into the throat, so she was able to remove more of it. She did blood work and sent a sample of the mass off for analysis, hoping this would tell us whether the chemotherapy was helping. We reminded each other that it had been eight weeks since his initial surgery — longer than either of us had dared to hope.

Results of the biopsy and blood work were not encouraging. There was no indication that the chemotherapy was helping and RBC values were continuing to fall. Dr. Bradley consulted with the local specialists again; they had just added a veterinary oncologist. There was another more expensive drug that we could try. Carboplatin would be safer because it did not have the cardiotoxic side-effects that Doxorubicin had. However, anorexia was a common side-effect. This concerned me because Smokey wasn't eating that well and was beginning to lose weight. However, Dr. Bradley reminded me that a rabbit's GI system is very different from humans, dogs, and cats — the species the drug had been used on.

We scheduled chemotherapy for February 20 to allow Smokey time to recover from surgery. At my suggestion, we began regular weekly checkups. We kept Smokey on all previous medications and added Pet-Tinic® Vitamins, a low dose of Rimadyl® to make him more comfortable, and Epogen® injections to help boost RBC. I continued to syringe-feed three times a day, cradling Smokey in my arms like I was feeding a baby.

Both doctors thought Smokey's first chemotherapy with Carboplatin went very smoothly. The procedure went much faster, as this drug did not have to be administered as slowly. Dr. Bradley said his color came back much faster than it had before and the oncologist said the treatment had gone as well as he had ever seen in any animal.

A week later, at Smokey's regular checkup, Dr. Bradley saw a small amount of regrowth of the cancer. It had been exactly four weeks since his last surgery and we both knew the new chemotherapy had not yet had time to work. We scheduled surgery for the following Tuesday, March 3, hoping that since we were catching the growth earlier this time the mass would be smaller and the surgery shorter. Because the surgery was less invasive, Smokey bounced back quickly. We continued with all medications and syringe feeding. On March 13 we did blood work again and scheduled chemotherapy for March 20. Again, the treatment went smoothly, with no noticeable side-effects.

Around the first of April, Smokey's appetite began to decrease and he was losing more weight. Dr. Bradley expressed concern about all the medications he was on, especially the combination of Rimadyl® and Prednisone. Reluctantly, I agreed to take him off the Rimadyl. More than anything, I didn't want Smokey to be in pain. Almost immediately, I felt that Smokey was uncomfortable. Dr. Bradley reluctantly put him back on the Rimadyl and discontinued the Septra®. I began to syringe-feed more frequently to keep Smokey's weight up. We had a wonderful Easter together. In December, I had simply prayed for Christmas together, never daring to hope he would make it to Easter!

We had tentatively scheduled chemotherapy for April 17. However, the Monday after Easter, when I was giving him medicine, I was sure I saw a mass, so I scheduled an extra checkup for Wednesday. Dr. Bradley looked at the part of the mouth where the mass had always been and saw nothing. But I insisted, holding him on his back, opening his mouth with a medicine dropper, and pointed out what I had seen. Sure enough, it was a fairly large mass that was positioned in front of where Dr. Bradley was looking with the otoscope. We cancelled the chemotherapy for the 17th and scheduled surgery instead.

Smokey's surgery was scheduled for 10:30 a.m. At 4:30 a.m. I syringe-fed him. Around 8:00 a.m. he ate

most of 1/4 slice of bread and tried to eat some pellets for the first time since the beginning of April. I know he was telling me how very much he wanted to stay with us. However, Dr. Bradley was very discouraged after surgery. The mass was much larger than ever before. It went all the way across the roof of the mouth and back part way into the esophagus. She was amazed that he was even able to swallow when I syringe fed him — let alone eat the bread that morning! She clearly felt we were reaching the end of the road. She suggested that we either stop treatments completely or, if we continued, that we put him under anesthesia at least monthly so she could get a good look at the mouth.

Smokey never really bounced back from that surgery. However, he remained sociable and patiently endured the fluids and medicine he was given. Because of the weight he had lost, I syringe fed four to five times a day. He continued to accept that eagerly, ate bread on his own, and begged for his yogurt. Still, I knew things weren't OK.

George went with me to Smokey's April 24 checkup. Dr. Bradley immediately noticed that one side of Smokey's face was swollen and filled with fluid. She took several samples, using a needle, for analysis. This was the only time in almost five months of treatment that Smokey really flinched in pain during a procedure. It broke my heart. As gently as she could, Dr. Bradley let us know it was time to start thinking about saying goodbye. She put him back on Septra®, added Lasix® to help with the fluid buildup, and had me put warm compresses on his swollen face three times a day. We scheduled a follow-up appointment on April 29.

Throughout all this, Smokey remained somewhat active and extremely social, continuing to spend time wherever we were. By now he was eating almost nothing on his own, though he still eagerly accepted the syringe-feeding. Twice I carried a jar of his "gruel" into the living room to finish stirring while watching TV, then set the jar on the floor, waiting for a commercial before going back to the kitchen to fill the syringe. Both times Smokey went over to the jar and tried to eat from the jar — clearly letting me know he was ready to be fed.

Despite frequent syringe-feeding, Smokey had lost more weight by April 29. On May 1 Smokey had his final surgery. The mass was big again and this time there was evidence of abscessing. Dr. Bradley removed what she could. Either gum tissue or cancer had completely covered his lower molars, explaining why he could no longer chew even bread. I suggested x-rays. They showed abnormality in the jaw, indicating that the cancer was spreading there as well. We all knew we were at the end of the road. We would keep Smokey comfortable as long as possible, but knew we were now counting our time together in days.

I arranged to work at home most of the following week, knowing it would probably be our last week with Smokey. Tuesday evening, for the first time, I found myself really force-feeding the gruel. Smokey could really no longer swallow it — and nearly choked before I realized it was time to stop. After he recovered, I tried a little canned pumpkin, but even it was too solid. I decided that from that point on I would only feed baby food — and only when Smokey wanted it. The remainder of his life would be lived on his terms.

Wednesday Smokey eagerly ate the baby food and we had a wonderful evening with him. Thursday morning he still begged for food, but ate much less. He seemed to be having trouble breathing. I gave him Lasix, which helped a little. Around 1:00 I knew it was "time." I got a shallow box to set him on for support and lined it with soft towels. I set Smokey on the towels, but he refused to stay. He **ran** across the room and hopped on his favorite shelf. Even though it was clearly "time." Smokey was making it clear that he was still not ready to give up. I lifted him gently back onto the box and carried him to the car. On May 7, 1998, Smokey made a peaceful exit from this world as I held his head, stroked him, cried, and told

him how much he was loved.