

The Death of a Dream

U-CD Coppertop Sky's The Limit UD GN BN GO RE OBHF CCA
by Karen Thompson and "Kirby"



Once upon a time, in a land not-so-far away, there lived a beautiful soul. He was an exuberant, handsome, sweet, and strong six-year-old Golden Retriever, named "Kirby." Kirby was a very special dog with unlimited potential. His registered name, Coppertop Sky's the Limit, said it all. The sky really was the limit for the talent he possessed. That is, until the day Kirby encountered a particularly nasty tick.

I so wish this had been a fairytale because fairytales have happy endings. Kirby's story did not have a happy ending. I also have so many regrets about the 19-month journey we took together because of that tick. There were so many tiny clues and vague symptoms that I did not pick up on quickly enough. My only wish is that I had the knowledge at the beginning of this journey that I have now. With that knowledge, it is quite likely I would still have my gorgeous Golden boy at my side.

Kirby was truly a remarkable dog. He excelled in everything we did together. He had such a joyous air about him and loved working with me. We started in obedience together and Kirby aced his classes. He attained first placements on all legs of every title that he finished in multiple venues. Kirby entered the GRCA Obedience Dog Hall of

(continued on next page)

Death of a Dream, continued from previous page

Fame upon completing his AKC Utility Dog title, because he had already accumulated more than the number of Highest Scoring Dog (HIT) awards required for that honor. He even went HIT out of the Utility A class the first time he ever stepped foot in a Utility ring by defeating an Obedience Trial Champion dog in a run-off. Kirby was the AKC All-Breed Top Open A dog for 2013. I am so very proud of all that Kirby and I accomplished together. I knew, however, that Kirby was not himself for all of 2013, but I could not quite put a finger on exactly what was going on.

I found the tick in late November 2012. I had been using several popular tick preventatives, but somehow this lone tick found its way up into the ruff on the front of Kirby's neck and slipped under his collar. Because it was under his collar, I did not see it right away. Kirby was outside in the yard with me when he started scratching at the front of his collar. I playfully went over to help him scratch and immediately felt the bump. After removing the collar, the engorged tick was clearly visible. It had obviously been there for a day or two. I carefully removed the tick and saw the angry red and necrotic area where the tick had been, so I immediately cleaned the area meticulously with alcohol and Betadine. I felt a sense of dread and a huge lump forming in my throat. Even though it was one of the larger, brown dog ticks, which traditionally do not carry as many diseases as the smaller deer ticks, something was telling me this was not good. I immediately called my vet and asked to start Kirby on Doxycycline as a precaution. My vet, knowing how careful I am about my dog's health, got the prescription ready. I started Kirby on Doxycycline for 30 days that very afternoon, thinking that if the tick were carrying any disease, the Doxycycline would take care of it. Little did I know, that was far from the truth.

In January 2013, just two months after the tick bite, a hot spot formed just below Kirby's right ear, not too far from the site where the tick had been removed. The tick bite I had treated with Doxycycline was a distant memory, so I believed there was no way this hot spot could be related. I was very wrong, but did not put everything together until much later. We live in Wisconsin, so it was very odd for a hot spot to form in the middle of winter. Kirby had never had any skin or other health issues to this point, so I took him into our regular vet for treatment. The vet shaved the area and gave me topical antibiotics and steroid spray to promote healing and control the itching. Two days later, on a weekend, the hot spot abscessed in a matter of hours. I had no choice but to rush Kirby to an emergency veterinary clinic. When the abscess site was lanced, it exploded with pus. A drain was placed in the wound, and we took Kirby home with instructions to apply hot compresses every few hours to encourage drainage. With proper care and a lot of antibiotics, the abscess and hot spot healed over a period of several weeks. A month and a half later, Kirby developed another hot spot. We again treated the area, and it healed. Two months later, he ended up with yet a third hot spot. These two subsequent hot spots were in different areas. The second hot spot was near his withers, and the third was lower, on the side of his abdomen. I remember thinking how curious it was that Kirby was getting these hot spots when he had never had any health or skin issues before. I began to wonder if, for some reason, Kirby's immune system was not functioning at full efficiency, so I started to add immune supplements to his food every day.

During this entire time, I was actively showing Kirby in AKC



Kirby and Karen earn 7th Place in the Open Division at the AKC National Classic, Orlando, FL, December 2013. Photo by Pix 'N Pages

obedience trials. He had done very well in Novice in 2012 and we were moving on to Open. Kirby was normally a very consistent performing dog, but his performances were now very up and down and very inconsistent. I chalked that up to his being a five-year-old intact male. The shows where he appeared distracted or sluggish were mostly combination conformation and obedience shows where female dogs in season were often in the crowd. I found out later that was not the case at all. Kirby was suffering from the brain fog and body aches that are common symptoms of many tick borne diseases (TBD). Kirby could be stellar and easily win HIT, and then be flat on the floor two hours later, so sick that he didn't care if other dogs walked right over the top of him. These bizarre and seemingly unrelated symptoms went on throughout 2013. I was quite surprised when Bob Self Jr., of *Front & Finish* magazine, contacted me with the news that Kirby had attained the top All Breed Open A dog ranking for 2013. Kirby had been sick the entire time, and his performances had been very inconsistent. Now I wonder what we could have accomplished together had he not encountered that tick. I miss my perfect partner so much. Kirby was always my very dear friend first, and my performance partner second.

On July 4, 2013, Kirby and I played outside in the yard, and then I walked up onto the deck where my husband, Rod, was sitting. Kirby laid down beside me in the shade. He was resting nicely when I walked into the house to get a cold drink. The day was warm, but not extremely hot. Rod called out to me in a very alarmed voice to come back out on the deck. I ran out to see Rod standing over Kirby, whose right rear leg appeared to be in spasm. Kirby was conscious, and the spasm only lasted about two minutes. Since I work in a hospital and have a lot of medical background, I thought it looked very much like a focal seizure. It was the Fourth of July, so I had no choice but to phone the vet service on call instead of my regular vet. I described what had happened to the on-call vet. She thought it was not a focal seizure but a spasm from running and playing in the hot weather. She said I could bring Kirby in for lab tests, but even if it were a seizure, the incident had passed and there would be no way to confirm if it had indeed been a focal seizure or not. I decided to wait and talk to my regular vet



Kirby and Karen at Flambeau River, WI, September 2013. Photo by Karen Thompson.

about it the next day. After the incident, Kirby seemed completely normal again. When I talked to my vet about the incident, he agreed that it could have been a focal seizure but it might have been just a muscle spasm. He thought it best to keep a close eye on Kirby, and if it happened again, we would need to address it.

We thought the seizure could have been the result of an incident a few days earlier when Kirby was chasing a rabbit in the back yard. He was running full tilt after the rabbit when it dodged under a huge log swing. The rabbit fit underneath the swing, but Kirby did not. He hit his upper neck/head area hard on the swing. My vet thought the right leg spasm could be a neurological deficit stemming from that accident. He recommended we watch Kirby closely and, if we saw any more leg spasms, consult a canine chiropractor.

A month passed, and the leg spasm reoccurred. We made an appointment to see a top canine chiropractor and also had a complete clinical workup done on Kirby. With cancers rampant in the Golden Retriever breed these days, I was afraid that Kirby might have some type of underlying cancer that was causing all his ailments. All the lab tests and X-rays came back negative except for his Snap DX 4. It was positive for Anaplasmosis. We immediately treated with Doxycycline. Kirby did not have any cancer that we could detect. Since Anaplasmosis was the most "user-friendly" form of TBD that I knew of, I was not concerned when Kirby's SNAP test came back positive. I knew from all my reading that, in most cases, a mere 14-day treatment with

Doxycycline would eradicate the Anaplasma. It was disturbing, since I had been very careful about Kirby's tick prevention and had not seen any ticks at all. However, deer ticks can be very small and extremely difficult to find, so we started Kirby on a 30-day regimen of high dose Doxycycline. We thought that would more than take care of the Anaplasmosis.

Upon examining Kirby, the canine chiropractor made some necessary adjustments, but was unsure if a neck injury was the actual cause of the right leg spasms. She did not rule it out though, and agreed to keep working with Kirby through a series of every other week appointments. During this time, Kirby did have subsequent right rear leg spasms, but they did not appear to be getting more intense or more frequent, so I continued to work with the canine chiropractor. This chiropractor was also well-versed in traditional Chinese medicine, so we decided to change Kirby's diet and introduce some acupuncture as well, hoping to alleviate Kirby's leg spasms. She also felt that Kirby's immune system, for whatever reason, had been compromised, so we started him on specialized immune supplements to enhance and support his immune system.

Kirby's performances were becoming more and more up and down during the fall of 2013. My mentor and trainer attended a show with me and saw firsthand what I had described to her. She recommended that I get Kirby's thyroid checked. I had been checking Kirby's thyroid every year via the "gold standard" through Michigan State University, and it had always been perfectly normal. Thinking that my trainer might be right and this could be a thyroid issue, I contacted Dr. Jean Dodds and sent a blood sample to her. Much to my surprise, Kirby's thyroid was slightly low. Dr. Jean Dodds recommended supplementation with low dose Soloxine. She suspected some sort of underlying cause for the low thyroid levels. She said that once the underlying process causing the low thyroid was worked out, his thyroid function would likely return to normal. We started the thyroid supplementation according to Dr. Dodds' recommendations, but even after six weeks on the supplement and a subsequent normal thyroid lab test, I saw no improvement in Kirby's performance. In fact, his performance was markedly worse. Kirby had qualified for the 2013 AKC National Obedience Classic in the Open Division, to be held in December at the Orange County Convention Center in Orlando, Florida. Kirby was an excellent performing dog, but he was clearly having huge ups and downs during 2013. That fall, his performances were a rollercoaster of enormous highs and extreme lows. Knowing this and still believing that working with the canine chiropractor would eliminate his rear leg spasms, we entered the show and planned to attend.

In Orlando, we had entered a few of the obedience pre-shows in Open B and Utility B. My trainer flew to Orlando to lend support and coach us. If Kirby was "on" and feeling good, he was an awesome performing dog. If he was experiencing one of his downturns, he would barely qualify, but he never really showed outward signs of illness. Even during the times when he didn't qualify, I could tell that Kirby was trying very hard to do everything right. I knew that something was happening to him that he had no control over because, if he could have, he would have moved heaven and earth to perform well for me. He was just that kind of dog. However, when I showed Kirby for two days in the pre-shows, he could hardly make it through the classes and did not qualify at all. It was like he just could not concentrate and would forget what he was doing.

We decided to go ahead and show in the AKC Classic on

Saturday. Kirby was entered in one class on Saturday and two on Sunday. If Saturday did not go well, we planned to pull him and not ask him to perform on Sunday. Kirby was not his usual precise self, but he did qualify on Saturday. We showed again on Sunday, and again he was not "on," but he qualified in both classes. Much to my amazement, Kirby placed 7th in the Open Division at the Classic. I knew he was not the same happy, precise dog I had the pleasure of showing the year before, but I still believed the neck injury from the rabbit incident likely needed time to heal. Kirby had a lot of heart and it showed over the weekend at the Classic. We showed again in January at a large local combination show, and Kirby qualified and won a few classes, though his performances were not what he was capable of at all. Through all of this, I was frustrated because I knew the level at which this dog could work, but I never was angry or upset with Kirby. I could see in his eyes he was trying so very hard to do his best. Something was preventing him from performing at his best. But what was it?

On a Friday night in late January, my husband and I attended our training school annual banquet. My sister-in-law always stays with our dogs anytime we are going to be gone more than a few hours. While still at the banquet, we called to let her know we were on our way home. She reported everything was fine. When we arrived home an hour later, Kirby did not meet us at the door. This was very disturbing and totally out of character for him. I went down the stairs and found him standing in the hallway with his head down. It was apparent he could not move. I immediately ran to him. He licked my face, but whined when he moved any of his extremities. I thought this was now looking more and more like a TBD. Since it was January in Wisconsin, I wondered how he could have come in contact with a tick? We were careful while in Florida, so I was confident he did not pick up any ticks down there.

I rushed Kirby to the emergency veterinary clinic. We did a total work up including blood work and X-rays. I was again afraid it might be an underlying cancer because the disease is so rampant in Golden Retrievers. All the test results came back negative except for the Snap 4 DX. Kirby was positive for Anaplasmosis yet again. But how could this be? We had just gone through all of this about two months prior and had treated with Doxycycline. Could he have picked up a tick on the way home from Florida and been re-infected? It wasn't likely, but we started Kirby on Minocycline this time. I was comforted by the fact that it was very unlikely an underlying cancer was causing Kirby's ailments, but I was also very concerned now about the persistent Anaplasmosis. I started reading everything I could get my hands on about TBD.

The following month was relatively benign. To my relief, Kirby appeared to be feeling much better, so I showed him at a small show in mid-February. If it had not been for a misstep by me, Kirby would have had nearly a perfect score in Utility B. I was ecstatic because my precise, high-performing dog was back! However, my elation was short-lived. One night a few weeks later, in early March, just as I was preparing to go to bed, Kirby had a grand mal seizure. With my medical background, I knew immediately what I was dealing with and what to do. I stayed close and comforted him reassuringly until the seizure subsided. It lasted only about two minutes from beginning to end, but there was no mistaking what had happened. It was a full grand mal seizure.

I became frustrated and got very angry. What was going on with my Kirbster? I felt compelled to get to the bottom of what

was causing his illness and help him feel better. I brought out all the information that I had been researching, and all the material friends had sent me regarding TBD. Many of these documents had links to articles written by experts in the field. I read them all. I realized that every one of the articles was authored or co-authored by the same veterinarian, so I dug and dug and dug until I found his email address. I sat down and wrote a timeline of Kirby's symptoms from the very beginning, starting with the hot spots in January 2013. I shot off an email with a description of what had been going on with Kirby and attached Kirby's timeline of symptoms. Much to my surprise, the veterinary TBD expert returned my email almost immediately and we began working together to help Kirby. We placed Kirby back on Minocycline and sent blood samples to the North Carolina State University Vector Borne Disease Diagnostic Labs for specialized testing.

These specialized tests are now being done by North Carolina State University Galaxy Labs, which is considered to be the gold standard for testing, and also IDEXX Laboratories. Both are reliable testing facilities. The test we ran on Kirby was a Polymerase Chain Reaction (PCR) Comprehensive Tick Panel. This is a molecular test that looks for bacterial DNA present in blood samples, and it is a far more valuable tool in diagnosing TBD than a SNAP test. The SNAP test only indicates antibodies in the blood, which tells us the dog has been exposed to the TBD. The SNAP test is still a good screening tool, but it does not tell us if there is an active infection that needs to be treated. The PCR test, on the other hand, not only detects actual bacterial DNA, but can isolate and identify individual strains of a TBD. Therefore this test does not only confirm an active infection, it can accurately label the infection(s) as well. These new testing methods take defining strains of TBD and diagnosis to a whole new level. They also expedite subsequent appropriate treatment protocols.

Kirby's PCR Comprehensive Tick Panel came back negative for all known strains of TBD except, once again, Anaplasma. I asked how that was possible, since Kirby had been repeatedly treated for Anaplasma using both high-dose, long-term Doxycycline and, more recently, Minocycline. I learned from working with the veterinary TBD expert that strains of TBD are now mutating and becoming tetracycline-resistant. This means that tetracycline alone will no longer be effective against some strains of TBD. Kirby was infected with one of these new strains. That is why, even with repeated dosing of Doxycycline and Minocycline, Kirby got better for awhile each time, but relapsed within a week or so after treatment. With the clarity provided by these new test results, we started Kirby on an eight-week combination antibiotic regimen of Minocycline (which he was already on) and Rifampin. Rifampin is an old antibiotic that had been mainly used for Tuberculosis in the past. This combination has been shown to be very effective against these stubborn resistant TBD infections because both drugs cross the blood brain barrier easily. Since bacteria from TBD also infects cerebrospinal fluid (CSF), it is very important to rid the CSF of bacteria as well. The only way to accomplish this is to use antibiotics that can successfully cross the blood brain barrier and gain access to the CSF.

I was so happy. I felt that finally, with the help of the TBD expert and the new combination antibiotic treatment, Kirby would recover and be fine again. Kirby appears to be the first documented case of canine resistant TBD in the U.S. We know there are other cases out there, but none have been docu-

mented to date.

In mid May 2014, a week before Kirby was due to finish his eight-week antibiotic treatment, we sent blood samples in again for a repeat PCR. This time, we only tested for Anaplasma, as all the other strains had already been effectively ruled out from the first comprehensive PCR test. The PCR test came back negative for Anaplasma. This was the first time that Kirby had tested negative for Anaplasma in over a year. I cannot put my elation into words! I planned to rest Kirby for a few months and let him normalize from the almost constant antibiotic therapy he had endured over the previous year. Then, once recovered, we could get back to training! The veterinary TBD expert recommended that we draw blood for a Liver Profile and CBC, and if they remained at normal levels, we would keep Kirby on the antibiotic combination for two more weeks. He said this was in lieu of doing a lumbar puncture and testing his spinal fluid for bacteria. He said there can be lingering bacteria in the CSF, even though the blood is now bacteria free. We needed to be sure that all the antibiotics had not damaged Kirby's liver. Up to that point, we had been doing labs every few weeks to check his liver and blood levels, and they had always come back perfect. Well, this time his CBC was perfect, but we noticed minute changes in two of his Liver Profile levels. My regular vet decided to stop the antibiotics since we had gotten the negative PCR back. He said if there were residual bacteria in the CSF, Kirby's own immune system would likely be able to eradicate it. We could not take the chance of continuing the antibiotics. So, finally, Kirby was medication free! Those labs were drawn on Tuesday, May 27, 2014.

Two days later, on Thursday, May 29, I noticed that Kirby was not gulping down his food as he normally did. He was eating, just not as exuberantly. He seemed totally normal otherwise. That was the day that the Liver Profile and CBC results came back, and also the day we took Kirby off the antibiotics. When my regular vet called with the test results and his recommendation about the antibiotics, I mentioned that Kirby seemed to be off his food a bit. Since he had been on antibiotics for so long, we decided to give him a few days to normalize before we took issue with it. On Friday, May 30, Kirby was more sluggish about eating and by Saturday evening, May 31, he would not eat at all. He still seemed relatively normal, perhaps a bit tired, but otherwise fine. Just by chance, we were in the Twin Cities hosting an obedience seminar that weekend. Sunday morning, Kirby bounced into the training center with me and greeted everyone. He was still off his food, acting a little more tired, but otherwise normal. By noon on Sunday,

Kirby started to look and act ill. I asked a veterinarian friend of mine attending the seminar to take a look at him. She thought he needed to be seen immediately, and even though it was a Sunday, she recommended I call my regular vet back home. I called, and my vet suggested I take Kirby to a very reputable emergency vet clinic in the Twin Cities. He said he would call and give them all the background information while I drove over there. I immediately left the seminar with Kirby.

When we arrived at the emergency vet clinic, Kirby was admitted at once. I was told it would be about an hour while they ran some tests. That stretched into several hours. During the time I spent in the waiting area, I watched as a multitude of owners brought their dogs in and subsequently had one of the vets come out to give them results and send them on their way. One of the vet techs eventually came out to tell me that the vet treating Kirby wanted to talk to me in an exam room, and I knew immediately that the news would not be good. I have worked in the medical community for years and have seen this scenario many times. I walked into the exam room and waited for what seemed an eternity. The vet entered and gave me the results. In his opinion, Kirby had a 30-50 percent chance of making it. I was absolutely stunned! How could this be happening to my beautiful, vibrant boy! When we came in, I was so sure they were going to send us home with some meds and tell me to contact my regular vet on Monday.

The emergency vet then showed me the preliminary lab results. Kirby's platelet count, which had been completely normal five days earlier, on Tuesday, was now 30,000—horribly low. His liver function tests were so high they were off the scale. On Tuesday, only two levels had been high normal. All the other labs were perfectly normal. The ER vet explained that somehow there was a two-pronged attack going on in Kirby's body. Something was attacking his platelets and his liver. I asked if the repeated antibiotic treatment could have damaged his liver and was told no. If the antibiotics were the culprit, we would have seen changes on his liver function tests weeks earlier.

Since this is a critical care equipped ER veterinary clinic staffed with a team of critical care trained vets 24/7, it is horrendously expensive. Naturally, they had to go over costs with me before they would begin treatment. I was deeply offended. No amount of money was going to stop me from saving Kirby, so I agreed to their terms, and they started treatment. I was told we could not see Kirby until later, after they finished more testing. I was devastated, but told them to stop at nothing to save him. At this point, I truly believed Kirby would pull through.



Handsome Kirby entered the GRCA Obedience Dog Hall of Fame, June 2013, upon attaining his Utility Dog title.

Death of a Dream, continued from previous page

The staff at the ER clinic said my husband and I could come back later that evening and spend time with Kirby. I called his breeders, Terry and Steve Southard, who are also our very good friends, to tell them what was happening. They said to call with any changes and were very supportive. When we returned to visit with Kirby, he looked very sad, but stable, and we could tell he was very happy to see us. They asked that we not stay long so that he was more likely to rest. We visited on and off several times during the evening, and each time Kirby looked very sick, but stable. I remained hopeful that the morning would bring good news.

Early the following morning, we returned to learn that Kirby's platelet count was now down to 7,500. I started to feel the lump in my throat grow larger. The critical care specialist asked if there was *anything* that we had done differently in the past few weeks, or if there was something toxic that Kirby could have gotten into. There was nothing...except I had put a very expensive tick collar on Kirby because I didn't want to expose him to any more chemicals, such as topicals that could not be removed. I wanted him to be chemical free and normalize after all the antibiotic therapy, but I also needed to keep him safe from ticks. I thought a tick collar would be the most benign way to do that. I could take it off in the house and only keep it on him when he was outside. I made that decision based on what I thought was best for Kirby at the time, but now I truly regret that decision. I believe the chemicals in that tick collar played an integral role in the resulting sad chain of events.

The vets were now certain there was some type of autoimmune disorder attacking both Kirby's liver and his platelets. They asked for permission to bombard Kirby with steroids to stop his body's inappropriate immune response. I granted that permission. It is important to note that these vets were well aware that Kirby's most recent PCR for TBD came back negative. If the test had shown an active infection, it would not be wise to begin intensive immunosuppressive therapy. In that case, the steroids would deactivate Kirby's immune system completely and he would have no defense against the indwelling bacteria. Since the test had come back negative, it was the only course of therapy we had left that could possibly save Kirby from his own errant immune system.

My husband and I spent all day at the ER clinic, in the lobby, in the parking lot, and in visiting with Kirby. I kept Kirby's breeders apprised of the situation. Kirby was actually still strong enough to walk to the exam room to visit with us. I kept asking myself, "How can this be happening! He can walk into an exam room but we are slowly losing him." The critical care specialist who cared for Kirby stayed well past the end of her shift to be there for him. She told me they would repeat the labs at midnight and call with the results. She also encouraged me to make Kirby a "no code," which meant if he stopped breathing or his heart stopped on its own, they would not try to revive him. It was then that the reality of the situation hit me. Up to that point, I had continually pushed the thought of losing my beloved boy out of my head. Yes, I knew it was possible, but I would not let myself think that way. When we visited Kirby again at 10:30 p.m., he was experiencing some bloody diarrhea. This was likely from stomach erosion due to not eating and the fact that he had very little platelet activity to clot off the bleeding. He still walked into the exam room to visit with us. There appeared to be no other positive or negative change. However, we were told his chances of surviving were less than

one percent now. That was incredibly hard for me to accept as Kirby walked without assistance into the exam room from the Critical Care area. Again, I was thinking, "How can this be happening to Kirby? Can I please wake up from this nightmare now?" The staff recommended we go back to the hotel and try to rest a bit. They would call with the midnight lab results. There was no resting, but we did go back to the hotel.

At 1:28 a.m. my cell phone rang. It was the vet. The midnight labs showed Kirby's hemoglobin was low and his platelet count was now zero, which meant he was most likely bleeding internally. His eosinophil count was also zero, which meant his immune function was nil, and his liver had ceased to function at all. We needed to come back to the clinic immediately and make some critical decisions. The vet went on to say that if it were just the platelets or just Kirby's liver, they possibly could have pulled him through. But with the two-pronged attack his body was waging on itself, it was very difficult to keep him stable, much less save him. We could still opt to do a blood transfusion to try to raise his platelets and eosinophil count, but he would likely go into respiratory distress, have to be intubated, and placed on a ventilator. His chances of making it were all but gone. I was devastated, broken, and sobbing. I called Terry and Steve, Kirby's breeders, to give them the very bad news. I thank God every day for them, because they somehow talked me into having the strength to make some very hard decisions for Kirby. It absolutely destroyed me to do so. I didn't know how I could ever go back to the clinic and make those decisions, but I did. I wanted to take Kirby home, but I was told that he would never make the 100-mile journey. I spent a great deal of time just lying with Kirby on the big fluffy blanket they had fashioned on the floor for him. I held him in my arms and told him what a wonderful boy he was. I asked him to never really leave me, and I told him how much I loved him. Then, my beautiful "purple boy" closed his eyes for the last time. That was the hardest thing I have ever done in my life. To this day I don't know where I found the strength to follow through with what had to be done. It's been over three months since I lost Kirby on June 3, 2014, and I still cannot see through the tears as I write this. I'm still waiting to wake up from this nightmare.

I know my sweet, sweet Kirby would not want another person or animal to suffer through what he had to endure. It would truly make him happy if, in telling his story, others could be spared. A friend asked me to write this article to share information about these mutating tick borne diseases in honor of Kirby. It will be years before veterinary protocols change and treatment options are inclusive of combination antibiotics. There is no way to know if the infection a dog contracts is tetracycline resistant or not, so we must always err on the safe side. Most local veterinarians do not have this information yet and probably will not for several years. That means each individual owner needs to be well informed and become an active advocate for their canine companions.

Kirby's loss was actually an entire series of unfortunate events. First, I didn't put the intricate puzzle of unrelated symptoms together quickly enough. If I had, I might have been able to save him. I regret that very much. I'm smarter than that. Why didn't I figure things out before it was too late? It has made my life a living hell. I will have to learn to live with myself and hopefully, in time, I will be able to find some peace. Second, neither my regular vet nor I had any idea this persistent Anaplasma infection could be tetracycline resistant.

Death of a Dream, continued from previous page

We just did not have the information. That information alone may have saved Kirby's life because we started treatment the very day I found the tick. Then, the correct antibiotics would have been administered well within the necessary seven-day treatment window. And third, since *Anaplasma* was always termed the most "user-friendly" of the TBDs because it is normally easily eradicated with just a 14-day regimen of tetracycline, I did not take it seriously enough. Little did I know there are now several strains of *Anaplasma* out there, and one is a particularly silent and deadly strain.

I have also recently learned that, a few years back, several strains of TBD were reclassified. One of the most deadly strains of TBD was always known as Granulocytic Ehrlichiosis. That extremely noxious strain was recently reclassified as *Anaplasma Phagocytophilum*. That information definitely could have played a huge part in saving Kirby's life had my vet or I been aware of it, because this is the strain that Kirby had. Not only did Kirby have a deadly strain of TBD, but it was a tetracycline resistant form of that strain, as well. That is why Kirby's SNAP tests consistently came back as positive for *Anaplasma*, even after he had been treated multiple times with Doxycycline and Minocycline.

Anaplasma Phagocytophilum, formerly known as Granulocytic Ehrlichiosis, is particularly deadly because from the time it is transmitted, the host has only about seven days to be treated with *appropriate* antibiotics. If not treated within that window, the bacteria will go into a subclinical stage and hide in the spleen, bone marrow, and other organs. The likelihood of eliminating this organism with antibiotics decreases dramatically once it settles in. In fact, once it reaches the subclinical stage, it is nearly impossible to treat effectively. It may be possible to control it, but treatment will likely not cure it. From the spleen and bone marrow, the bacterium effectively depletes the host's immune system by inhibiting white blood cells from reaching maturity before they are released in the blood stream. Immature white blood cells cannot function efficiently, and the immune system is decimated. This was the cause of Kirby's hot spots and the other ailments that plagued him. All of Kirby's symptoms began about two months after transmission and about 30 days after he came off the Doxycycline. The constant underlying bacterial infection causes widespread inflamma-

tion throughout the entire host body. This is what caused Kirby's lowered thyroid function. Over time, the constant inflammation poses many health issues. In Kirby's case, this constant inflammation caused an autoimmune disease that lay quietly waiting for something to trigger it into action. I believe Kirby's trigger was the tick collar I put on him. Once triggered, the autoimmune attack works very quickly. The time from when Kirby first began to look ill until the time I lost him was less than 36 hours. It was the most horrific 36 hours of my life.

Please share this information. The tick population is currently exploding all across the U.S. and internationally, as well. New TBDs are being discovered all the time. We need to be well-equipped and informed ourselves, so we can be effective advocates for our precious furry friends and for each other. There are many documented human cases of this particular TBD, as well. In humans, it is referred to as Human Granulocytic Ehrlichiosis, or HGE. Some of these human cases did recover, only to develop different cancerous conditions a few years later and ultimately succumb to those. TBD is currently a huge multi-faceted health concern for all creatures in all parts of the country. Those who are fortunate enough to survive are sometimes doomed to endure horrible symptoms that come and go randomly. Research is ongoing now as to the correlation between previous TBD infections and certain common cancers and other dreadful disorders. I believe the incessant widespread inflammation caused by TBD does indeed lay the groundwork for many debilitating and life-threatening disease processes.

Thanks so much to each and every one of you for taking the time to read this article. It was not easy for me to write. It took three entire months to get to the point that I could put any of this information down on paper because it was like I was waiting to wake up from a terrible dream. Writing this article makes Kirby's death all too real. Unfortunately, it is real and it did happen. My hope now is that Kirby and I can save others from a similar tragic fate. I can't think of a better way to honor my beautiful boy.

One last thing, I would like to thank you on Kirby's behalf, as well. I am quite confident by reading this article, you have just made him smile.❖

Approved by the Editorial Review Board.