

Sammy is a young Labrador retriever from Bodega Bay, California. He is the “only child” of Brad and Emily and has been a good boy over all. About a month ago, Sammy began to become lethargic. His normal go all the time demeanor became less and less apparent as he spent more and more time laying in his bed. Initially his appetite seemed normal, but more recently it has obviously decreased. He reached a point where he seemed very reluctant even to walk a few feet, at which time he was taken to his veterinarian.

Sammy underwent a physical examination, which was unremarkable other than he indeed was reluctant to walk and he had a mild fever. Blood work was done and found to be unremarkable. Sammy was placed on antibiotics in case of a bacterial infection that might be causing his fever and malaise. He was to return in seven days for re-evaluation.

After the seven days, Sammy showed no improvement and was to the point where he was eating almost nothing and urinating in his bed in deference to having to get up and walk outside. His “parents”, at the point of near panic, have hospitalized Sammy for further diagnostics and supportive treatment.

Unfortunately, that is all the information I have so far as Emily wrote me this inquiry as Sammy was being seen on recheck. She promised to keep me posted and I have shared with her some of my thoughts about Sammy's problem, and I thought I would do so here as well.

Let's first summarize Sammy's symptoms. He has a fever and he is extremely reluctant to move. That about sums it up. So where do we go from here? Sammy needs another physical evaluation and I would also repeat the blood work. Though it was normal previously, his condition is very dynamic and the blood work may now reflect abnormalities that were previously unapparent.

On physical examination, I would pay special attention to Sammy's joints. I am suspicious that he has joint pain and hence his reluctance to move. If I am correct, his joints will be slightly swollen and likely tender to manipulation. This might be most apparent in his carpal joints and his tarsal joints also called wrists and ankles. This joint pain and associated swelling can occur with certain infectious diseases, one of which is Lyme disease.

Lyme disease is a tick born illness caused by a microorganism called *Borrelia burgdorferi* that among other symptoms can cause a painful arthritis and fever. Diagnosis is done through blood testing and a positive result coupled with a symptomatic dog living in an area where the disease is known to occur, likely means a case of Lyme disease. Sammy is from Bodega Bay, an area of California know to harbor the Lyme disease organism and the ticks to transmit it and therefore he needs to be tested. Caught early in its disease course, Lyme disease is usually very treatable and curable with appropriate antibiotic therapy.

Another possibility for Sammy's fever and joint pain is a disease called autoimmune arthritis. This disease is caused by the dog's own immune system attacking proteins within the dog's body causing immune complex formation in the joints which then causes an inflammatory reaction, which by definition is arthritis. This process is indeed painful and does cause fever. Diagnosis is achieved by a simple procedure called joint tapping, where joint fluid is removed via a syringe from various joints. The fluid is analyzed and examined for the presence of abnormal amounts of inflammatory cells and if present, autoimmune arthritis needs to be considered.

It is important to note that Lyme disease can cause similar findings in the joint fluid compared to autoimmune joint disease. Since the two diseases are treated differently, we must rule out Lyme disease before treating for autoimmune joint disease.

There are other tick born infectious diseases that can cause Sammy's symptoms; however, they are far less common in his location. Hopefully I will hear soon from Emily and we can find out for sure what has caused Sammy's problems and hopefully, he is own the road to recovery. Stay tuned.....