

## EXAMINE, please

by MaryDee Sist, DVM

If your dog just isn't feeling or acting right, please follow up on your hunches. Examine your dog and/or have him examined by your veterinarian. Early on, it can be difficult to diagnose some problems, even with sophisticated testing. But the diagnosis is needed to determine the treatment and the outcome. Older dogs grow lumps and bumps. Some of these are benign growths and will cause no harm. Some are malignant and will kill the dog. Lumps should be aspirated or removed and examined microscopically. This pathology exam can greatly influence the treatment and the outcome. If a dog dies suddenly, please have it examined. That obviously won't help that animal, but it certainly might benefit housemates or relatives or even future generations.

This is a personal example that will hopefully have a favorable outcome.

My 12-1/2-year-old Saluki bitch had been slowing down a bit, but her appetite was great. She had always been a vacuum when it came to food. Yet, she was whining, but didn't need to go outside or want to play like she usually did when she was being vocal. I couldn't figure out what she wanted. I was afraid it was a senile change, thanks to the TV advertisements on canine cognitive dysfunction syndrome (give me a break!), and was considering whether to order the medication. Her vaccination was due and I do believe in vaccinations. I have to treat very few distemper or parvo infected dogs nowadays thanks to the widespread use of quality vaccinations. I do stress that an annual physical is important. So, I took her to work with me to follow my own advice.

In doing a physical exam, I start at the front. I look at their gums and teeth and throat. And there IT was . . . a walnut-sized mass popping out of the tonsil in the back of her throat. I was horrified at IT's size, since I had not been able to feel IT externally. She had not coughed or drooled or acted in any way as if her throat bothered her. I tried to be logical, which is hard to do when it's your own pet. I did a fine needle aspirate of the lymph node next to the mass. The cytological or microscopic exam showed no signs of any abnormal or cancerous cells. Logic said to clean her teeth and get her on antibiotics, but I made an appointment with the head of surgery at the Michigan State University Veterinary College to remove IT.

Since this Saluki is part of my heart study, we know that she has an arrhythmia or irregular heart beat, a very slow resting heart rate and a lower than normal contractility on echocardiography (as do quite a few of our normal dogs). Any of these can indicate heart disease, so everyone at the vet school was very concerned about her welfare during surgery. Though radiographs showed that her heart looked "large," they also showed no evidence that the tumor had spread to her lungs. The heart condition, however, caused the anesthesiologist special concern over the choice of anesthetics and medications to use. My Saluki's arrhythmia is stress induced and the vet clinic is her most stressful place. She has had surgeries to repair her broken legs, and associates pain and trauma with any vet clinic. The clinicians were also concerned about her low white blood cell count and high packed

cell volume (red cell count), which can indicate disease states. I told them that those counts were normal for her and my research studies have shown that other Salukis can also have these values and be healthy.

The surgeon removed the mass, but there were areas seeded in the back of her throat that he could not remove. She did well under anesthetic through surgery, however, her recovery was quite stormy, due partially to the pain. Her arrhythmia kept everyone glued to the EKG monitor, ready to give antiarrhythmic agents if it went on too long. Her heart rate would slow so she had to be stimulated to keep her heart rate and blood pressure up. It was a rough few hours and I felt very guilty for putting her through it all. Especially when, after the surgery, she wouldn't eat, missing the first meal of her life that night. And even worse, some of IT was still there and would regrow.

The mass was submitted for a histopathological examination. What to do next depended upon finding out exactly what IT was, whether it was malignant, how malignant and the potential for it to spread. Throwing the removed tumor mass in the trash does not help with a prognosis. I needed to know exactly what IT was to know what to do about it.

Some growths are benign, that is, they are not cancers. A tonsil can get very large if it is filtering infection from something like tooth root abscess. Some growths are cancerous, highly malignant, and spread by growing into surrounding areas and/or flooding the blood stream or lymphatics with cancer cells. Some grow very slowly and don't commonly spread.

Some cancers are curable with surgery. But everything must be removed leaving only normal tissue at the margins. Some cancers can be killed with chemotherapeutic agents when they are seeded in the body. The side reactions are much less, and different, in dogs than in people. Some cancers can be killed with radiation treatments, if they have not spread widely. Some do not respond to any anticancer therapeutics that are currently available.

Radiation therapy offered the only hope of killing the tumor cells that were left in her throat. Since most tumor cells are rapidly dividing, they are more sensitive to the effects of radiation than normal cells. The goal is to destroy the tumor while minimizing damage to the normal tissues that will be included in the radiation treatment field. Small doses are given every few days over a period of 4 to 6 weeks. Radiation therapy can also be used palliatively, even if a cure is not possible, to improve the dog's quality of life. A few treatments can often alleviate the symptoms and relieve the pain of cancer by shrinking the tumor and reducing pressure on the surrounding tissues.

The next day she ate, though slowly and her throat was obviously sore. I felt better and not as selfish for putting her through the trauma. I was not ready to let her slowly waste away by not being able to eat.

I had recently attended a conference presented by Dr. Elsa Beck from the Animal Cancer Treatment Center in St. Clair Shores, MI. She is one of a small number of veterinarians who is board certified in both medical and radiation oncology (the study of cancers). She had lectured about the importance

of knowing the tumor type and grade of malignancy in determining the treatment and prognosis. She has a CURE rate of 85% for mast cell tumors and soft tissue sarcomas, like fibrosarcomas, in her practice. Some tumors are almost 100% curable, while other tumor types are more resistant to treatment. Those that have a higher metastatic potential have a lower cure rate because they have already spread before being diagnosed.

Dr. Beck examined my Saluki and thought that radiation would be of benefit, but the prognosis depended on the tumor type. If it was of salivary gland origin, it had an 85% chance of responding. If it was of tonsillar origin, then it had less than a 15% chance of long-term control. The area could readily be radiated and the side reactions would be limited to some dryness or possibly soreness in the mouth and "sun burning" of the skin a few weeks after beginning the treatments. She would have to be anesthetized for 10 to 18 treatments. If the histopathology indicated the poorly responsive, highly metastatic potential tumor type, then palliative treatment could shrink the tumor and relieve the pain when it regrew and would require only a few treatments with no side reactions.

We started my Saluki's radiation treatments. Her heart rate was carefully monitored for the 15 minutes she had to be under gas anesthesia. The radiation technician fed her jerkey treats when she was recovering, so her mind was on FOOD - this way she was not anxious or stressed, and her recovery was quick and smooth. After her treatments she feels great. She almost drags me into the radiation center because she knows

she gets treats. The problems are that it is a 90-mile drive each way for me, 2 to 3 times a week for 5 weeks; and the pathologist report said that the cancer contained both salivary and tonsillar components, was highly malignant, and had a relatively high potential for metastasis or spread. However, the oncologist also said that they don't have a lot of data on this kind of tumor because it is usually not diagnosed at this early stage before there are symptoms, so the prognosis can only be guessed at.

For now, my Saluki is feeling fine, romping around the house like a puppy and eating well. In the worst case, if there is spread that shows up later, the radiation treatments have prolonged a good quality and, hopefully, a good quantity of time that I have left with her. I caused her to be born and I feel I need to take care of her the best I can. When she starts to fail, I will not let her suffer. I treasure each extra day I have with her.

Take the time to enjoy your dogs. Look at your companions carefully to see how they are. If things don't seem right, follow up on your hunches. Have your dogs examined. Have lumps examined. Your attention could make the difference in days, or even years, of life for them.