

The value of diagnostics

by MaryDee Sist, DVM

I can't over emphasize the importance of having diagnostics done, both in the live dog and after death, if you are concerned about the health of your Saluki. Samples have been submitted for inclusion into the Saluki Tumor Registry, from dogs that were diagnosed as having "cancer," when subsequent histological examination on the submitted samples showed no evidence of cancer. These dogs did not necessarily have a terminal illness.

Recent articles have highlighted the value of doing ultrasonography to screen for cancer of various organs. When performed by a skilled operator, this examination allows visualization of soft tissues and is very sensitive in imaging masses, fluids or tissues that do not have the normal architecture. Since Salukis appear to be prone to having a fatal form of cancer, hemangiosarcoma, in their heart, liver and/or spleen, screening for masses is a useful tool, especially if everything appears normal. If a mass is seen, however, it is NOT always easy to differentiate cancerous masses from benign or non-malignant masses via an ultrasound. Further diagnostics are needed.

The following are pertinent excerpts from an article published in the [Journal of American Veterinary Medical Association](#) (JAVMA, Vol.234, No. 1, January 1, 2009, pages 88-94).

"Ultrasonographers are frequently asked to evaluate dogs with splenic mass and hemoabdomen before the dogs undergo surgery. The benign or

neoplastic nature of the splenic mass and the existence of gross metastatic disease are important factors for many clients in determining whether they want to accept the cost and potential risk associated with surgery. Unfortunately, conventional ultrasonography lacks the sensitivity and specificity for evaluating these splenic and hepatic changes. Benign splenic lesions such as hematomas and hemangiomas are ultrasonographically indistinguishable from hemangiosarcomas. Benign liver nodules such as nodular hyperplasia, a common finding in older dogs, may appear identical to metastases from hemangiosarcoma.

"The researcher's objective was to determine whether contrast harmonic ultrasonography could be used to distinguish splenic hemangiosarcoma from hematoma and to accurately detect and characterize liver nodules. This procedure was performed on 19 dogs diagnosed with splenic masses suspected to be hemangiosarcoma with or without hemoabdomen. Histological evaluation of the spleen resulted in a diagnosis of hemangiosarcoma in 11, hematoma in seven and an undifferentiated sarcoma in one dog. Their conclusions were that 'benign and malignant processes in the spleen were indistinguishable via CHUS' but it did accurately distinguish metastatic disease versus benign hepatic disease in dogs with splenic hemangiosarcoma."

If your Saluki is diagnosed with

an enlargement or mass, further diagnostics are necessary to determine whether the mass is cancerous and could be fatal to the dog, or whether it is benign and treatable. During the ultrasound examination, an experienced clinician can do a fine needle aspirate (FNA) of the mass to get cells that can be examined microscopically to see if they are cancerous. This is no more invasive than a needle stick, but because only a limited number of cells are retrieved, small masses can be missed. If a FNA is not possible, exploratory surgery and taking biopsies of the suspected tissue is needed for a definitive diagnosis. The prognosis for the dog's survival depends on this.

As reported in the Saluki Tumor Registry (ASA Newsletter, Summer 2008), of the 89 tumor samples that were examined, 33 were not malignant. Any time the spleen is involved, hemangiosarcoma certainly is a possibility, but benign hyperplasia or hematomas are also possible. Fifteen samples from masses in the spleen were evaluated; eleven were cancerous and, of these, five were primary splenic hemangiosarcomas. For four fortunate Salukis, the submitted specimen was a reactive or hyperplastic process and removal of the spleen was curative. For one 10-year-old Saluki, splenectomy allowed her to live nearly five more years. Of course, finances are always a factor, but it is sad to hear of Salukis that were euthanized based on an incomplete diagnosis, when they did not have terminal cancer.

Additionally, there is no way we

