

Ask A Vet: Urinary Problem Needs More Diagnostics

Sunday, January 12, 2014

Dear Dr. Weldy's,

My friend's dog has been urinating blood off and on for several months and has been treating him for a urinary tract infection with antibiotics. When he goes off the medicine, the blood comes back. The vet says he needs x-rays. Why would he need this?

-Concerned Friend

Dear Concerned Friend,

I do appreciate your friend's frustration. After multiple treatments of antibiotics, a standard urinary tract infection should have cleared up if the appropriate antibiotic was chosen. Sometimes we have to do urinary cultures with antibiotic sensitivities to be certain of the right one to use. There may be resistance to the antibiotic chosen, hence cultures are very helpful. I am sure the veterinarian wants to rule out bladder stones or tumors of the bladder and lower urinary tract. The most common presenting signs are stranguria (slow painful urination with spasms), hematuria (blood in urine), dysuria (difficult urination) and pollakiuria (excessive or frequent urination). I have also seen some animals cry out when picking then up around their abdomen. Ultrasounds and radiographs are very diagnostic when looking for stones or tumors. The other important diagnostic tool is urine sedimentation and cytology where we spin the urine down in a centrifuge to actually look for the crystals that may become bladder stones or cells that become cancer from a chronic cystitis or bladder infection.

The most common malignant tumor of the lower urinary tract is transitional cell carcinoma. Others that may be found include squamous-cell carcinoma, adenocarcinoma, leiomyosarcoma, fibrosarcoma, hemangiosarcoma and rhabdomyosarcoma. The transitional cell carcinoma or TCC has a tendency to be found in the older and smaller dogs less than 25 pounds and is the most common one found in the bladder and urethra. When looking at genetic or environmental risk factors, there have been studies to show that one should minimize exposure to certain herbicides and that in one study, a dog that consumed more vegetables at least three times a week had a significant reduction in developing TCC. Interestingly, in humans there was increase risk of bladder inflammation and tumors in humans that smoked cigarettes.

Thank goodness dogs don't smoke!

Treatment options if the dog is diagnosed with TCC include surgery with reported one year survival rate if the tumor can be resected, drug therapy alone with some NSAIDS (non-steroidal anti-inflammatory drugs) having complete or partial response with a six month survival rate, chemotherapy . radiation, photodynamic therapy (specific light wavelength exposure), or catheters and or stents to manage obstruction of urine flow if

found in the urethra. It is also noteworthy to know that there can be anywhere from 20 percent initially of metastasis to lymph nodes and lungs to 60 percent with extended survival time. The most important thing

to remember is getting the accurate diagnosis in order to give an intelligent prognosis of care and quality of life. Not all dogs read the books so sometimes it does take more diagnostics to find an answer.

-Dr. Wanda Schmeltz