

Canine Prostatic Carcinoma

What is canine prostatic carcinoma?

Prostatic tumors develop from abnormal growth of the cells of the prostate or abnormal growth of the cells of the urethra that then spread to the prostate. This results in either primary prostatic carcinoma or transitional cell carcinoma (TCC) of the urinary tract with prostatic involvement. Differentiating between a TCC that has originated in the urinary tract and a true prostatic carcinoma is difficult but behavior and treatment for both is similar. Prostate tumors are locally aggressive, and they have a high chance of movement to other areas of the body (local lymph nodes, lung and bone).

What are the clinical signs of a prostatic tumor?

The urethra runs through the prostate, so common clinical signs of a prostate tumor include straining to urinate, frequent urination, and blood in the urine. If the disease includes bone, limping or bone pain may be observed.

How is a prostatic tumor diagnosed?

Several tests are needed to diagnose a prostatic tumor. These include a rectal palpation to feel the prostate, advanced imaging (abdominal x-rays, abdominal ultrasound or CT) to visualize the prostate, and a urinary sample. If a diagnosis cannot be made based on these tests, more advanced tests such as a prostatic wash, prostatic aspirate, urinary tract evaluation with a camera, or prostatic biopsy will be recommended.

How are prostatic tumors treated?

Surgical removal of the prostate would be ideal, but that is usually impractical: it is associated with a high risk of mortality and a high complication rate, with very little impact on overall survival. As a consequence, we recommend a combination of treatments as outlined below.

Radiation therapy can be used to treat prostatic carcinoma, but the cancer is poorly controlled by radiation therapy alone. Because of this, and the high rate of spread to other areas of the body, we recommend chemotherapy with radiation, or in lieu of radiation therapy, to try to improve survival. The true benefit of chemotherapy is unknown. Mitoxantrone, an IV chemotherapy drug given once every three weeks until progression of disease or intolerance, has been shown to be an effective palliative drug in humans. In addition to chemotherapy, we recommend a non-steroidal which has been shown to have efficacy against carcinomas in general. Even without the use of chemotherapy, a non-steroidal may help to ease pain and discomfort.

In the event the prostatic tumor leads to the inability to urinate, surgical stents can potentially be placed through the urethra to allow the passage of urine.

What is the prognosis for a prostatic tumor?

In general, we can control the clinical signs associated with a prostatic tumor for 4-8 months with radiation therapy and/or chemotherapy. Some dogs do much better with survival times over a year. Other dogs do not respond as well and thus have shorter than expected survival times.