Canine Soft Tissue Sarcoma

What is a soft tissue sarcoma?

A soft tissue sarcoma is a type of cancer that develops in the connective tissues of the skin and subcutaneous structures. Locally it invades into the nearby tissues, muscle, and skin. It also has the potential to spread to other parts of the body and that risk can be determined by the histological grade. Typically, low-grade (grade I and II) tumors have a low rate of spread. High-grade (grade III tumors) have a higher chance of spreading to other areas of the body.

What clinical signs are associated with soft tissue sarcomas?

Most soft tissue sarcomas start as slow growing, soft to firm masses under the skin. They cannot easily be moved around under the skin as they are attached to the underlying muscle. Sometimes they will grow quickly and cause pain or difficulty walking, depending on where the tumor is located.

How are soft tissue sarcomas diagnosed?

Prior to treatment we recommend complete staging to determine if the tumor has moved to other areas of the body. This includes blood work, lymph node aspirates, chest x-rays, and potentially ultrasound of the abdomen. Diagnosis of a soft tissue sarcoma requires a biopsy.

How are soft tissue sarcomas treated?

Surgery is the treatment of choice for any soft tissue sarcoma. Complete removal with a margin of normal tissue must be obtained for a curative treatment of a low-grade sarcoma. It is common to have local recurrence of a soft tissue sarcoma if clean margins are not obtained. If a soft tissue sarcoma comes back, it is likely to be more aggressive and possibly more difficult to treat. If the tumor is not r emoved entirely, and additional surgery is not possible, radiation therapy or low dose chemotherapy can be considered. In the case of a high-grade sarcoma, surgery plus chemotherapy is the treatment of choice. An IV drug called doxorubicin is administered once every 2-3 weeks for a total of 6 doses.

What is the prognosis of a soft tissue sarcoma?

Low grade soft tissue sarcomas have a very good prognosis, especially if removed completely by surgery. Survival times are 2-4 years with low grade tumors. High grade tumors have a shorter survival time (typically less than one year), even with aggressive treatment.