

SOFT TISSUE SARCOMA

A soft tissue sarcoma is a tumor arising from "connective" tissues in the body, most commonly tissues under the skin (subcutaneous). They can arise from blood vessels (hemangiopericytoma), tendons or ligaments (fibrosarcoma), nerves (nerve sheath tumor), fat (liposarcoma), or other tissues. Regardless of the origin of the tumors, the soft tissue sarcomas all behave similarly.

The initial evaluation for these tumors includes a biopsy and/or removal of the tumor. The pathologist assigns a "grade" to the tumor when looking at it under the microscope and evaluates the tissues to determine if all the cancer cells have been completely removed ("margins"). We use the grade to help predict how the tumor will behave. This influences both the prognosis (outcome) and treatment plan. For example, low-grade tumors are unlikely to spread and complete surgical removal of the tumor may be the only treatment required. High-grade tumors have a higher chance of spreading and are more aggressive.

"Staging" tests are recommended once a diagnosis is made to determine if the tumor has spread (metastasized). This cancer most commonly spreads to the lungs, so chest x-rays are performed to evaluate the lungs. This cancer rarely spreads to other areas of the body.

The primary treatment recommendation for soft tissue sarcomas is wide surgical excision. Because these tumors are invasive, the surgeon must remove the tumor with a large margin of normal tissue both around and underneath it to ensure complete removal. Even when a large margin is taken, sometimes tumor cells are still left behind. When this occurs, additional treatment is needed; otherwise, there is a chance that the tumor might return. A CT scan may be recommended for a closer evaluation of the extent of the tumor and help with surgical planning.

Once the tumor is removed, the grade and margins will help determine if any follow-up therapy may be recommended to attempt to prevent recurrence or metastasis of the cancer in the future. If the tumor is low grade and completely excised with wide margins, no further therapy may be necessary aside from monitoring. If the tumor is incompletely excised, follow-up treatments with definitive radiation therapy, electrochemotherapy, metronomic chemotherapy, or other treatments may be offered. If the tumor is found to be high grade or if metastasis is already present, chemotherapy may be recommended to attempt to prevent or slow progression of metastasis. The most commonly used chemotherapy agent for soft tissue sarcomas is doxorubicin, although other options may be considered.

If a soft tissue sarcoma is diagnosed but is too large for surgical excision, palliative radiation therapy can be recommended to attempt to reduce tumor size, slow progression of the cancer, and reduce discomfort associated with the tumor. This is a temporary effect and not a curative therapy. Radiation therapy is unfortunately not available at the Animal Cancer Center of Texas, but a referral can be provided to the nearest radiation oncologist should this treatment be recommended for your pet.

Please remember that each patient is an individual and can have variable presentations of their cancer and responses to treatment. Specific details and recommendations for your pet can be discussed in detail during a consultation with the oncologists at Animal Cancer Center of Texas.