TEXAS ONCOLOGY
More breakthroughs. More victories.®

Sarcoma

Sarcomas are cancers of connective tissue. They fall into groups based on whether they arise in soft tissue or bone.

- Soft tissue sarcomas can originate from cells of muscle, fat, nerve, fibrous tissue, deep skin tissue, or blood vessels. However, in many cases, the cell of origin is unknown. Soft tissue sarcomas most frequently are found in the arms or the legs, but can occur anywhere in the body.
- Bone sarcomas more commonly occur in children and adolescents. The most common types are osteosarcoma and Ewing sarcoma. Osteosarcoma, a cancer of the part of the bone that gives bone its strength, is found most often in the bones around the knee. Ewing sarcoma most often occurs in the bones of the pelvis, chest wall, or the middle of long leg bones, but can also present in soft tissue.

These tumors are different from other “cancers of the bone” such as breast cancer, which spreads to bone, or multiple myeloma, which arises from blood cells in the bone marrow.

Statistics

- Sarcomas account for about **1 percent** of adult cancers and about **20 percent** of childhood cancers.
- In the U.S., about **13,460 new cases of soft tissue sarcoma** are expected to be diagnosed in 2021, with approximately **5,350 deaths**.
- Approximately **3,610 new cases of bone and joint cancer** are expected to be diagnosed in the U.S. in 2021, with an estimated **2,060 deaths**.

Risk Factors

There are no known reasons for developing sarcomas, but certain risk factors have been identified based on common characteristics in individuals who developed the disease, including:

- High doses of radiation exposure from treatments for other cancers; however, radiation treatment techniques have improved to ensure the targeted area is treated more precisely so effects on surrounding tissues and organs are minimized.
- Individuals exposed to herbicides with high doses of phenoxyacetic acid and wood preservatives with chlorophenols have a higher risk.
- Individuals with certain inherited diseases, including Li-Fraumeni syndrome, retinoblastoma, Paget’s disease of bone, multiple exostoses syndrome, Gardner syndrome, Werner syndrome, Gorlin syndrome, von Recklinghausen disease (neurofibromatosis), or tuberous sclerosis have an increased risk of developing a soft-tissue or bone sarcoma.
- Damage to a person’s lymph system, which can occur through surgery or radiation therapy, is also a risk factor associated with soft-tissue sarcoma.

Signs and Symptoms

In the early stages, it can be difficult to determine if a sarcoma is present and can go undetected for a long period of time. Bone pain, suspicious lumps, or swollen areas of the body should be evaluated by a physician, who may conduct a biopsy to determine if the lump is a malignant tumor or benign. Over time, tumors will grow, become sore, and eventually cause pain, bone fracturing, swelling, numbness, tingling, or weakness because the tumor presses against nerves or muscles.

Tips for Prevention

There are no known ways to prevent the development of a bone or soft-tissue sarcoma. Maintaining a healthy lifestyle and getting regular check-ups are the best ways to reduce the risk for developing all forms of cancer.

Treatment Options

Once a sarcoma is diagnosed, the treatment plan will be based on type, location, stage, and the patient's overall health. Depending on the cancer's location, as well as its stage of development, surgery is an option for treatment. For a soft-tissue sarcoma, tissue in distant sites is sometimes removed if the disease has spread to other areas. Chemotherapy or radiation therapy may also be used to shrink the tumor before surgery. Following the surgery, patients may receive radiation therapy or chemotherapy to improve the chances of eliminating all tumor cells. Proton therapy, targeted therapy, immunotherapy, and palliative care are treatment options.

About Texas Oncology

Texas Oncology is an independent private practice with more than 500 physicians and 210 locations across the state. Meeting the oncology needs of Texans for more than 35 years, the practice includes Texas Center for Proton Therapy, Texas Breast Specialists, Texas Oncology Surgical Specialists, Texas Urology Specialists, and Texas Center for Interventional Surgery. As a lead participant in US Oncology Research, Texas Oncology played a role in the development of more than 100 FDA-approved therapies. For more information, visit www.TexasOncology.com.

Sources: American Cancer Society, American Society of Clinical Oncology, and Sarcoma Foundation of America

Updated: 7/18/2021

www.TexasOncology.com
888-864-4226

TEXAS ONCOLOGY
More breakthroughs. More victories.®