



Osteosarcoma

What is Osteosarcoma?

Osteosarcoma is the most common type of cancer developing from bone. It occurs when bone cells develop changes that cause bone growth where it shouldn't be. These cells sometimes spread to other parts of the body, most commonly the lungs. This is known as metastasis.

Osteosarcoma is most common in the pediatric population, but rarely occurs in adults. It is most commonly found in the long bones: femur, tibia, humerus. It sometimes affects other bones in the body.

Symptoms:

Pain at the affected site, fever that comes and goes, swelling, and decreased range of motion are the most common symptoms. Tenderness when pressing on the affected site is common. Occasionally, night sweats, bony pain that awakes the person from sleep, and fractures can occur.

How is it diagnosed?

Typically, the cancer is identified on x-ray of the affected bone. A skilled surgeon may need to take a small portion of the cancer as a biopsy to confirm the diagnosis. Sometimes, labs or more imaging such as PET scan or CT are required to further determine the diagnosis and improve the treatment plan.



Do I need surgery?

Yes. Most osteosarcomas are first treated with chemotherapy for a few weeks, then surgery is required. 90-95% of the time, limb-sparing surgery can be performed. If the tumor is large, invades blood vessels or other vital structures, or does not respond to chemotherapy, amputation may be necessary.

What is my prognosis?

Prognosis has greatly improved in the last few decades. Currently, the 5-year survival rate is >70% for non-metastatic disease. Those with prompt diagnosis and treatment have the highest chance of survival.