

Osteosarcoma

What is osteosarcoma?

Osteosarcoma is a cancer of the bone that destroys tissue and weakens the bone. It most often affects teens. Osteosarcoma begins when immature bone cells become cancer cells instead of bone. There are 2 types of osteosarcoma: a medullary (central) tumor, which is more common, and a peripheral (surface) tumor. Each type of tumor has several subtypes. The most common subtype is conventional central osteosarcoma.

Where is osteosarcoma found in the body?

Osteosarcoma most often starts in the bones around the knee joint, either at the femur, which is the lower end of the thighbone, or the tibia, which is the upper end of the shin bone. The next most common place is in the humerus, the upper arm bone near the shoulder. However, osteosarcoma can develop in any bone in the body. Rarely, osteosarcoma occurs as a tumor in the body's soft tissue, outside the bone.

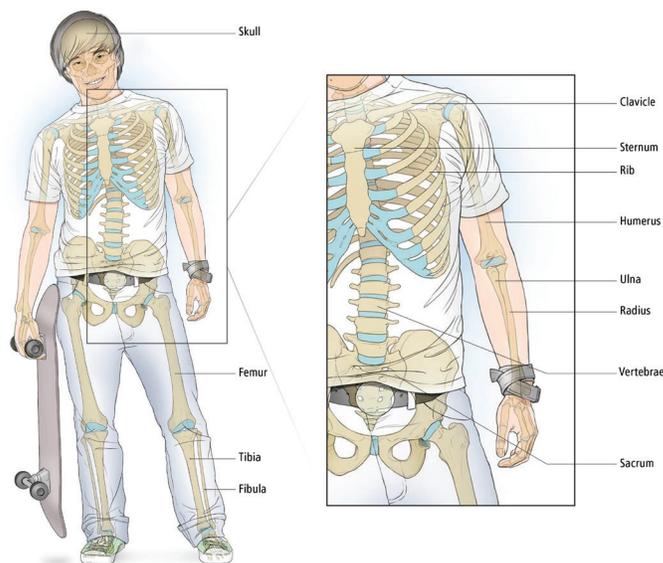


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What does stage mean?

The stage is a way of describing where the cancer is located, if or where it has spread, and whether it is affecting other parts of the body. Doctors describe osteosarcoma as localized, which means the cancer hasn't spread from where it began; metastatic, which means the cancer has spread to another part of the body; or recurrent, which means the cancer has come back during or after treatment. Find more information at www.cancer.net/osteosarcoma.

How is osteosarcoma treated?

The treatment of osteosarcoma depends on the stage and grade of cancer, possible side effects, the person's overall health, and the person's and family's preferences. Surgery and chemotherapy are the most common treatments. During surgery, the surgeon removes the tumor and some surrounding tissue. Limb-sparing surgery is used whenever possible to help keep the use of the arm or leg. Occasionally, a limb may need to be amputated. After both types of surgery, physical therapy is important to help regain physical function. Chemotherapy is often given before surgery to reduce tumor size, after surgery to destroy any remaining cancer cells, as well as for the treatment of metastatic disease, even if it is not visible on x-rays.

When making treatment decisions, consider a clinical trial; most children and teens with cancer are treated as part of one. Clinical trials are an option to consider for treatment and care for all stages of cancer. Talk with your child's doctor about all treatment options. The side effects of osteosarcoma treatment can often be prevented or managed with the help of your child's health care team. This is called supportive care or palliative care and is an important part of the overall treatment plan.

How can I help my child or teen cope with osteosarcoma?

Helping your child or teenager understand a cancer diagnosis is a key part of the coping process. Children and adolescents with cancer should be treated at a pediatric cancer center. These centers not only provide access to the latest treatments, they also offer age-appropriate programs for social and emotional needs. Encouraging your child and other family members to share their emotions can be helpful in managing the diagnosis, treatment, and healing process.

Questions to ask the health care team

Regular communication is important in making informed decisions about your child's health care. It can be helpful to bring someone along to appointments to take notes. Consider asking your child's health care team the following questions:

- What type and grade of osteosarcoma has been diagnosed? What does this mean?
- Is the disease located only in the bone where it started?
- What is the chance that the disease has spread (metastasized), even if we do not see it on x-rays?
- Can you explain my child's pathology report (laboratory test results) to me?
- Would you explain my child's treatment options?
- What clinical trials are available for my child? Where are they located, and how do I find out more about them?
- What treatment plan do you recommend for my child? Why?
- What is the goal of each treatment? Is it to eliminate the cancer, help my child feel better, or both?
- Who will be part of my child's treatment team, and what does each member do?
- How will this treatment affect my child's daily life? Will he or she be able to go to school and perform his or her usual activities?
- What short-term and long-term side effects may be associated with my child's cancer treatment?
- What are the chances that osteosarcoma will come back after treatment?
- What follow-up tests will my child need, and how often will he or she need them?
- If I'm worried about managing the costs of cancer care, who can help me?
- Where can I find emotional support for my child? For my family?
- Whom should I call with questions or problems?

Find more questions to ask the health care team at www.cancer.net/osteosarcoma. For a digital list of questions, download Cancer.Net's free mobile app at www.cancer.net/app.

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WORDS TO KNOW

Amputation:

Surgical removal of all or part of a limb

Benign:

A tumor that is not cancerous

Biopsy:

Removal of a tissue sample that is then examined under a microscope to check for cancer cells

Chemotherapy:

The use of drugs to destroy cancer cells

Clinical trial:

A research study that tests a new treatment, surgical method, or drug

Lymph node:

A tiny, bean-shaped organ that fights infection

Malignant:

A tumor that is cancerous

Metastasis:

The spread of cancer from where it began to another part of the body

Orthopedic oncologist:

A doctor who specializes in surgery when cancer affects the bone

Pediatric oncologist:

A doctor who specializes in treating cancer in children and teens

Prognosis:

Chance of recovery

Rehabilitation:

Process that helps a person obtain the best physical, social, and psychological function during and after cancer treatment

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