

Osteosarcoma - Childhood - Follow-Up Care [1]

This section has been reviewed and approved by the [Cancer.Net Editorial Board \[2\]](#), 11/2015

ON THIS PAGE: You will read about your child's medical care after cancer treatment is finished and why this follow-up care is important. To see other pages, use the menu on the side of your screen.

Care for children diagnosed with cancer doesn't end when active treatment has finished. Your child's health care team will continue to check to make sure the cancer has not returned, manage any side effects, and monitor your child's overall health. This is called follow-up care. All children and teens treated for cancer, including osteosarcoma, should have life-long follow-up care.

This plan may include regular physical examinations and/or medical tests to monitor your child's recovery for the coming months and years. Learn more about the [importance of follow-up care \[3\]](#).

The main considerations for the long-term health of children and teens who have had osteosarcoma are recurrence of the disease or appearance of a new type of cancer, orthopedic complications, and other late effects of the cancer treatment.

Watching for recurrence or secondary cancer

One goal of follow-up care is to check for a recurrence. Cancer recurs because small areas of cancer cells may remain undetected in the body. Over time, these cells may increase in number until they show up on test results or cause signs or symptoms.

During follow-up care, a doctor familiar with your child's medical history can give you personalized information about the risk of recurrence. Your doctor will also ask specific

questions about your child's health. Some children may have blood tests or imaging tests as part of regular follow-up care, but testing recommendations depend on several factors, including the type and stage of cancer originally diagnosed and the types of treatment given.

Recurrence of osteosarcoma more than five years later is rare. The drugs used to treat osteosarcoma have a small chance, approximately 1.5%, of causing a blood cancer called leukemia. This is called secondary or induced leukemia.

Managing long-term and late side effects of childhood cancer

Sometimes, side effects may linger beyond the active treatment period. These are called long-term side effects. In addition, other side effects called late effects may develop months or even years afterwards. Late effects can occur almost anywhere in the body and include physical problems, such as heart and lung problems and second cancers, and emotional and cognitive (memory, thinking, and attention) problems, such as anxiety, depression, and learning difficulties.

For osteosarcoma, there may be orthopedic complications following treatment. During follow-up care, doctors evaluate whether the surgery resulted in a well-functioning limb or whether there were complications.

Common orthopedic complications include:

- Fractures, commonly called broken bones. Fractures may occur if treatment included bone grafting. A bone allograft uses bone from another person to repair and rebuild damaged bone.
- Problems with an internal prosthesis, which is an artificial body part, such as an artificial knee
- Infection

Doctors typically treat fractures and prosthesis complications with another surgery. And they treat infections with long-term antibiotic therapy. However, occasionally, these approaches fail and an amputation is needed.

Other possible late effects for children treated for osteosarcoma are related to the type of chemotherapy used. The most common drugs and related long-term effects include:

| Chemotherapy drug used | Potential long-term effect | Monitoring and management |
|-------------------------------|---|---|
| Cisplatin (Platinol) | Hearing loss, neuropathy, which is pain or numbness in fingers and toes | Hearing tests; hearing aids, in some cases |
| Doxorubicin (Adriamycin) | Heart problems | Periodic echocardiograms [4] |
| Etoposide | Induced leukemia (see above) | Treatment, typically similarly to the treatment a newly diagnosed person with leukemia receives |
| Ifosfamide | Infertility, kidney damage, memory impairment | Freezing of sperm for boys who have gone through puberty before beginning chemotherapy Ovarian cryopreservation, the freezing of a portion of the ovary, could be recommended for girls when it becomes a standard technique. Learn more about preserving fertility in children with cancer [5]. Meanwhile, kidney damage, especially loss of salts in the urine, may require supplements. This is unlikely if kidney damage was not already been a problem during treatment. |
| Methotrexate | Scarring of the lungs or liver, memory impairment | Breathing function tests, blood tests |

Generally, most children and teens recovering from osteosarcoma do well. Based on the type of treatment your child received, the doctor will determine what examinations and tests are needed to check for long-term side effects, such as heart problems, hearing loss, kidney damage, and the secondary cancers. Follow-up care should also address your child's quality of life, including any developmental or emotional concerns, especially if amputation was necessary. Learn more about [childhood cancer survivorship](#) [6].

The Children's Oncology Group (COG) has studied the physical and psychological effects that childhood cancer survivors face. Based on these studies, COG has created recommendations for long-term follow-up care for childhood, adolescent, and young adult cancer survivors that can be found on a separate website: www.survivorshipguidelines.org [7].

Keeping personal health records

You are encouraged to organize and keep a personal record of the child's medical information. The doctor will help you create this. That way, as the child enters adulthood, he or she has a clear, written history of the diagnosis, the treatment given, and the doctor's recommendations about the schedule for follow-up care. ASCO offers [forms to help create a treatment summary to keep track of the cancer treatment your child received and develop a survivorship care plan](#) [8] once treatment is completed.

Some children continue to see their oncologist, while others transition back to the general care of their family doctor or another health care professional. This decision depends on several factors, including the type and stage of cancer, side effects, health insurance rules, and your family's personal preferences. Talk with your health care team about your child's ongoing medical care and any concerns you have about his or her future health.

If a doctor who was not directly involved in your child's cancer care will lead the follow-up care, share the cancer treatment summary and survivorship care plan forms with him or her, as well as all future health care providers. Details about the specific cancer treatment given are very valuable to the health care professionals who will care for your child throughout his or her lifetime.

The [next section in this guide is Survivorship](#) [9], and it describes how to cope with challenges in everyday life after a cancer diagnosis. Or, use the menu on the side of your screen to choose another section to continue reading this guide.

Links

[1] <http://www.cancer.net/cancer-types/osteosarcoma-childhood/follow-care>

[2] <http://www.cancer.net/about-us>

[3] <http://www.cancer.net/node/29386>

[4] <http://www.cancer.net/node/24509>

[5] <http://www.cancer.net/node/29101>

[6] <http://www.cancer.net/node/25395>

[7] <http://www.survivorshipguidelines.org/>

[8] <http://www.cancer.net/node/25394>

[9] <http://www.cancer.net/node/34591>