



Childhood Cancer

Childhood cancers are rare, accounting for less than 1 percent of all cancer diagnoses. However, childhood cancers remain the most common cause of disease-related deaths among children outside the newborn period. Common types of childhood cancer include leukemia, lymphoma, and solid tumors such as brain and central nervous system tumors, Wilms tumor, testicular and ovarian germ cell tumors, hepatoblastoma, neuroblastoma, rhabdomyosarcoma, retinoblastoma, soft tissue sarcoma, and bone cancer.

Statistics

- Approximately 10,590 U.S. children under age 15 are expected to be diagnosed with cancer in 2018. About 1,180 deaths of children under age 15 are anticipated.
- In Texas, more than 1,700 children under age 20 are diagnosed with cancer and almost 200 children die annually.
- More than half of childhood cancers are leukemias (30 percent) or brain and central nervous system cancers (26 percent).
- The five-year survival rate now exceeds 80 percent, which has increased significantly in the last few decades due to treatment advances. The survival rate for the most common childhood cancer, acute lymphoblastic leukemia, has improved dramatically to almost 90 percent. Several other types of childhood cancer, including pediatric kidney tumors and most forms of lymphoma, now have five-year survival rates approaching or greater than 90 percent.

Symptoms and Signs

Cancers in children may be difficult to recognize, as symptoms are often similar to those caused by common illnesses or injuries. Parents should watch for unusual signs that persist and consult a physician with any concerns.

- An unusual lump
- Unusual swelling
- Unexplained paleness
- Lack of energy
- Easy bruising
- Persistent pain in one area of the body
- Limping
- Unexplained fever
- A prolonged illness
- Frequent headaches, often with vomiting
- Sudden vision changes
- Unexplained weight loss
- Unexplained bleeding

Prevention and Risk Factors

The origin of most childhood cancers is unknown and cannot be prevented. A small number of environmental factors, such as exposure to radiation, may increase childhood cancer risk. Children with genetic syndromes like Down syndrome face an increased risk for developing leukemia. In a small number of cases, inherited genes can be linked to an increased risk for some forms of cancer in children. Physicians may recommend close follow up or preventative surgery to reduce the risk of cancer developing in a particular organ.

Treatment Options

Treating childhood cancer differs greatly from treating adults with cancer. For example, children can recover better from high doses of chemotherapy than adults. Treatment depends on the type and stage of the cancer and may include surgery, chemotherapy, radiation therapy, proton therapy, immunotherapy, targeted therapy, and stem cell transplants. A combination of treatments may be used.

Children diagnosed with cancer can benefit from being treated at centers specializing in pediatric oncology, which use protocols developed for children, have specialized pediatric equipment and pediatric and surgical sub-specialists, and have clinical trials specifically for children.

Sources: American Cancer Society, Children's Oncology Group, American Society of Clinical Oncology, National Cancer Institute, Centers for Disease Control and Prevention, Texas Cancer Registry