

PATIENT EDUCATION HANDOUT

Understanding Childhood Cancers

Larry J. Witmer, DO, FCOFP^{1,2}; Miranda Garmo, OMS-III²

Paula Gregory, DO, MBA, FCOFP, Editor

Lindsay Tjiattas-Saleski, DO, MBA, FCOEP, FCOFP, Associate Editor

¹University Hospitals Health System

²Lincoln Memorial University-DeBusk College of Osteopathic Medicine

This handout provides essential information about childhood cancers, including types, causes, symptoms, diagnosis, treatment options, and prevention.

TYPES OF CHILDHOOD CANCERS

The most common types of cancers that develop in children include:

- Acute leukemias (blood cancer)
- Lymphoma, including Hodgkin and non-Hodgkin (cancer of the lymphatic system)
- Retinoblastoma (cancer of the eye)
- Sarcoma (bone and soft-tissue cancer)
- Central nervous system tumors (cancer of the brain and spinal cord)
- Wilms tumor (kidney cancer)
- Thyroid cancer
- Ovarian tumors
- Neuroblastoma (cancer that forms in an early form of nerve cells)

CAUSES AND RISK FACTORS

- Genetic conditions
- Immune deficiency syndromes (inadequate immune response to infection resulting in susceptibility to infection)
- Family history
- Exposure to radiation or certain chemicals
- Secondary cancer can develop in survivors of retinoblastoma

SIGNS AND SYMPTOMS

Signs and symptoms can vary depending on the type of cancer. Although one symptom alone does not suggest cancer, the combination of persistent symptoms is important to be mindful of. It is essential to consult a healthcare professional for evaluation if your child is experiencing any of these symptoms.

- Fever that follows an unusual course or does not respond to appropriate therapy
- Unexplained weight loss
- Bone pain
- Fatigue
- Bruising or unusual bleeding
- Unusual lumps or swelling
- Changes in vision
- Persistent headaches, often with vomiting

DOWNLOAD AND DISTRIBUTE

The PDF of this patient education handout is available for easy download and distribution to your patients at www.acofp.org/PEH.

PATIENT EDUCATION HANDOUT

Understanding Childhood Cancers

DIAGNOSIS AND TREATMENT

Although childhood cancers are rare, they can occur in numerous parts of the body. Treatment is more effective when diagnosed early, and the 5-year survival rate increases significantly.

Treatment for childhood cancers is dependent on the type, stage, and location of the cancer.

Common treatment options include:

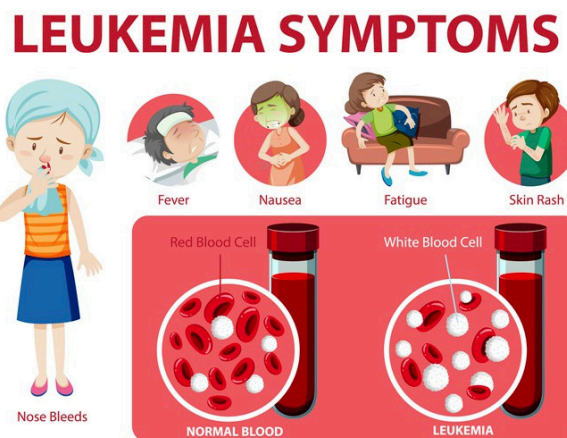
- Surgery
- Chemotherapy (medication that helps to kill cancer cells)
- Radiation therapy (using radiation to treat cancer)
- Immunotherapy (boosting the immune system to help a person's immune system fight off the cancer)
- Stem cell transplantation (taking healthy blood-forming cells and putting them into a patient's bloodstream to help them grow new blood cells)

PREVENTION

Although not all childhood cancers are preventable, certain things can improve overall well-being, such as:

- Minimizing exposure to environmental toxins (ie, tobacco and harmful chemicals) and sun exposure (apply sunscreen, dress in protective clothing, limit exposure during peak hours)
- Ensuring regular doctor checkups to ensure early detection
- Maintaining a healthy lifestyle with diet and exercise
- Genetic counseling if there is a family history of cancer

Please contact your osteopathic family physician if you have any questions or concerns.



SOURCES

1. American Cancer Society. Signs and symptoms of cancer in children. <https://www.cancer.org/cancer/types/cancer-in-children/finding-childhood-cancers-early.html>. Accessed January 2, 2024.
2. National Cancer Institute. Childhood cancers. <https://www.cancer.gov/types/childhood-cancers>. Accessed January 2, 2024.
3. UpToDate, Wolters Kluwer. Overview of common presenting signs and symptoms of childhood cancer. <https://www.uptodate.com/contents/overview-of-common-presenting-signs-and-symptoms-of-childhood-cancer>.

DOWNLOAD AND DISTRIBUTE

The PDF of this patient education handout is available for easy download and distribution to your patients at www.acofp.org/journal.