Rhabdomyosarcoma - Childhood

This section has been reviewed and approved by the Cancer.Net Editorial Board [1], February / 2014

Overview

ON THIS PAGE: You will find some basic information about this disease and the parts of the body it may affect. This is the first page of Cancer.Net?s Guide to Childhood Rhabdomyosarcoma. To see other pages, use the colored boxes on the right side of your screen. Think of those boxes as a roadmap to this full guide. Or, click ?Next? at the bottom of each page.

About sarcoma

Soft tissue sarcoma is a cancer that develops in the tissues that support and connect the body. It can occur in fat, muscle, nerves, tendons, joints, blood vessels, or lymph vessels. Cancer begins when normal cells change and grow uncontrollably, forming a mass called a tumor. A tumor can be cancerous or benign. A cancerous tumor is malignant, meaning it can spread to other parts of the body. A benign tumor means the tumor will not spread. In general, sarcoma is uncommon, accounting for about 1% of all cancers.

About rhabdomyosarcoma

Rhabdomyosarcoma is a type of soft tissue sarcoma (STS) that begins in mesenchymal cells, which are immature cells that normally become muscle. This disease develops in a type of muscle called striated muscle. Striated muscles are the skeletal voluntary muscles, which are those muscles that people can control.

Rhabdomyosarcoma can occur anywhere in the body:

- Head and neck: about 39% of all rhabdomyosarcoma cases. This includes parameningeal sites, near the membranes covering the brain, 24%; eye socket, 8%; and other head and neck locations, 7%.
- Urinary or reproductive organs: about 29% of cases
- Arms or legs: about 15% of cases
- Other sites: about 17% of cases. This includes the trunk (torso), intrathoracic (inside the lung and/or chest), biliary tract, retroperitoneal, pelvic, and perineal sites (close to the anus, vagina, and urinary structures).

Types of rhabdomyosarcoma

Each rhabdomyosarcoma tumor is classified as either favorable or unfavorable based on its histology, which is what the cells look like under a microscope. The terms ?favorable? and ?unfavorable? refer to the appearance of the cancer cells. In general, the more cancer cells look like normal cells, the more ?favorable? they are and the greater the chance that treatment will be successful.

Favorable histology tumors include the following:

- **Embryonal rhabdomyosarcoma.**This is the most common type of rhabdomyosarcoma, frequently found in the head and neck and in the reproductive and urinary organs.
  - **Botryoid rhabdomyosarcoma.** This is one subtype of embryonal rhabdomyosarcoma, found most often in hollow organs, such as the bladder or a girl?s vagina.
  - **Spindle rhabdomyosarcoma.** This is another subtype of embryonal rhabdomyosarcoma, found most often in the area around a boy?s testicles.

Unfavorable histology tumors include the following:

- **Alveolar rhabdomyosarcoma.** This is a more aggressive type of rhabdomyosarcoma, found most often in an arm, leg, or the trunk of the body.
- **Pleomorphic and undifferentiated rhabdomyosarcoma.** These are the rarest types of rhabdomyosarcoma, found most commonly in an arm, leg, or the body?s trunk.

Rhabdomyosarcoma is most often found in children and young adults. This section covers rhabdomyosarcoma diagnosed in children. Learn more about soft tissue sarcoma in adults [2].

Looking for More of an Overview?

If you would like additional introductory information, explore these related items. Please note these links take you to other sections on Cancer.Net:

- *ASCO Answers* Fact Sheet[3]: Read a one-page fact sheet (available as a PDF) that offers an easy-to-print introduction to this type of cancer.
- Cancer.Net Patient Education Videos: View short videos on childhood cancer [4] and sarcoma [5] led by ASCO experts that provide basic information and areas of research.

Or, choose ?Next? (below, right) to continue reading this detailed section. To select a specific topic within this section, use the colored boxes located on the right side of your screen.

Links:
[1] http://www.cancer.net/about-us
[2] http://www.cancer.net/node/19604
[3] http://www.cancer.net/sites/cancer.net/files/asco_answers_rhabdomyosarcoma_childhood.pdf
[4] http://www.cancer.net/node/27386
[5] http://www.cancer.net/node/27346