

HODGKIN LYMPHOMA

»» What is Hodgkin lymphoma?

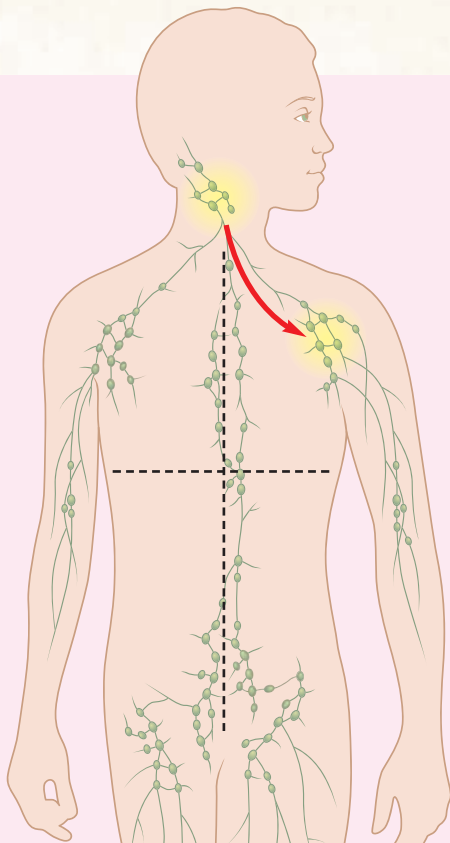
Hodgkin lymphoma is a cancer of the lymph system. The lymph system is a group of tissues and organs throughout the body. The lymph system makes and stores **lymphocytes**, kinds of white blood cells that help fight infection. In Hodgkin lymphoma, abnormal lymphocytes, called *Reed-Sternberg cells* or *Hodgkin cells*, grow out of control and keep normal blood cells from forming. These abnormal cells collect in the **lymph nodes** (glands that trap cancer cells

and other harmful matter), causing them to swell. The swollen lymph nodes can press on and harm other organs in the body.

There are different types of cancer cells involved in Hodgkin lymphoma. How the cancer cells look under a microscope determines the kind of lymphoma. Some people with Hodgkin lymphoma feel perfectly well or just have a lump, or enlarged lymph node, that they notice. Some people have fever, night sweats, and/or weight loss. Knowing the type of Hodgkin lymphoma helps the doctor plan the best treatment.

Who gets Hodgkin Lymphoma?

Children and adults of any age may get Hodgkin lymphoma. But it is most likely to affect people between the ages of 15 and 40 years and adults older than 55 years.



Hodgkin lymphoma usually starts in lymph nodes in the neck, chest, or under the arms. It then spreads through the body in an orderly pattern, from one lymph node to another lymph node nearby. The red arrow on the body (left) illustrates this pattern. The dotted lines show the sections in the body where the disease may be present.

The location and number of lymph nodes affected by the disease help determine its stage. Hodgkin lymphoma is divided into 4 stages. Staging information is used to plan treatment. Treatment is also based on the presence or absence of certain symptoms.

What happens with treatment?

Most patients start treatment for Hodgkin lymphoma soon after they are diagnosed. The goal of treatment is to cure the disease by using one or more of these therapies:

- **Chemotherapy** — uses drugs to kill cancer cells. Several drugs are often given together. Drugs that go into the bloodstream can reach cancer cells in most parts of the body
- **Radiation therapy** — uses high-energy x-rays to kill cancer cells. Radiation therapy may be given with chemotherapy to treat large tumors or if the cancer comes back
- **High-dose chemotherapy and radiation with stem cell transplantation** — uses high doses of drugs and radiation to kill all cancer cells in the body and replace them with stem cells that can make new blood cells. This option may be used if the cancer spreads or comes back after treatment

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»» How do we know if the treatment is working?

These tests can show how well the treatment is working and check for any health problems.

Complete blood count	Measures the number of each type of blood cell
Imaging studies (such as chest x-ray, CT scan, Gallium scan, bone scan, MRI, or PET scan)	Take pictures of the body to show if there are tumors (groups of cancer cells) in any organs or tissues or if the cancer has spread to the bones, brain, or spinal cord
Blood chemistry studies	Check for abnormal levels of certain chemicals in the body that could be signs of health problems
Lymph node biopsy	Looks for Reed-Sternberg cells and Hodgkin cells in a sample of tissue from a lymph node
Bone marrow aspiration	Shows if there are cancer cells in the bone marrow

The radiation oncologist

A radiation oncologist is an expert in using radiation to treat cancer. If radiation therapy is needed, this doctor will work closely with the medical oncologist (the doctor who leads the cancer care team) to plan treatment. It is important to talk with the radiation oncologist about the possible side effects of radiation therapy and what can be done to prevent long-term problems. Knowing the risks will help you make the best treatment choices.

How to make it easier to get through treatment

The treatments for Hodgkin lymphoma can cause side effects, such as:

- Infection
- Hair loss
- Nausea
- Constipation
- Fever
- Mouth sores
- Vomiting
- Skin rashes
- Bleeding
- Cough
- Diarrhea
- Extreme tiredness (fatigue)

Patients who have certain types of cancer or are starting some kinds of chemotherapy may also be at risk for **tumor lysis syndrome (TLS)**. TLS may damage the kidneys, heart, and other organs when large numbers of cancer cells are killed off very fast. Organ damage can be prevented if high-risk patients are treated before they start chemotherapy.

Tips on how to cope with the side effects of treatment:

- Report signs of infection, such as fever, and health concerns to the doctor or nurse as soon as you notice them
- Report signs of redness or skin changes after radiation therapy to the doctor or nurse
- Tell the medical team about all other medicines the patient is taking
- Learn how to care for the central line (the tube in the chest through which chemotherapy is given). And be sure to ask the nurses for other self-care tips. Nurses are great teachers
- Try to drink lots of fluids, eat well, and take care of the teeth and gums
- Ask about medicines to control nausea, ease pain, or keep side effects from getting worse
- Share feelings with others

Where to learn more

CureSearch
(National Childhood Cancer Foundation and Children's Oncology Group)
www.curesearch.org
800-458-6223

The Leukemia & Lymphoma Society
www.lls.org 800-955-4572

Lymphoma Information Network
www.lymphomainfo.net