Hodgkin Lymphoma: Radiation Therapy

Radiation therapy uses strong X-rays or beams of other types of radiation to kill cancer cells or stop them from growing. There are different kinds of radiation therapy. And radiation can be used in many ways. It depends on the type of cancer and where it is in the body.

For Hodgkin lymphoma, the radiation is aimed at the cancer from a machine outside of your body. This is called external beam radiation therapy (EBRT). It's part of the treatment for most people with Hodgkin Lymphoma.

When is radiation therapy used for Hodgkin lymphoma?

Your healthcare provider may advise radiation treatment if you:

- Have lymphoma that's only in 1 place in your body
- Have lymphoma in a few places that are close to each other
- Have lymphoma that is big to start with (called bulky)
- Have residual lymphoma remaining after chemotherapy

Radiation may be the only treatment needed for some people with nodular lymphocyte-predominant Hodgkin lymphoma (NLPHL).

Radiation may be part of your treatment if you are having a stem cell transplant. In this case, radiation is given to most of your body over a short period of time. This is known as total body irradiation. It's done to destroy your bone marrow. It makes room for the new stem cells.

How is radiation therapy given?

Two techniques of external beam radiation therapy (EBRT) are commonly used. Many healthcare providers prefer to use **involved site radiation therapy (ISRT)** . With ISRT, radiation is aimed at the lymph nodes that first had the lymphoma, as well as at areas close by. **Involved field radiation therapy (IFRT)** aims the radiation at larger areas of affected lymph nodes than ISRT. With IFRT, nearby organs may be exposed to radiation, too. For this reason, many healthcare providers now use ISRT instead of IFRT.

For EBRT, a healthcare provider called a radiation oncologist will create your treatment plan. During planning (called simulation), imaging tests such as CT, MRI, or PET scans will be done. These will take pictures of the inside of your body. Imaging tests will help show where you need treatment. They will help in taking measurements to find the correct angles for aiming the radiation. The plan, created after simulation, shows what kind of radiation you'll have as well as the dose. It also shows how long the treatment will last.

In most cases, radiation therapy is done 5 days a week, Monday through Friday, for several weeks. The treatment is done by a radiation therapist. The experience is a lot like getting an X-ray in that you do not feel anything, but it takes longer. Your radiation oncologist can prepare you for how you may feel during and after the treatment.

Possible short-term side effects

Radiation therapy affects normal cells as well as cancer cells. Side effects of radiation depend on the part of your body being treated. Some common side effects include:

- Red, dry, and itchy skin
- Feeling tired (fatigue)
- Dry mouth

- Upset stomach or nausea
- Loose stool or diarrhea
- Lowered blood cell counts

Because in the short term radiation irritates the skin and makes it more sensitive, stay out of direct sun exposure. If you are outside, cover your skin. Use sunscreen during and after radiation treatment each day.

Possible long-term side effects

Long-term side effects depend on the part of your body being treated. Some of these late effects are common and others are rare. One of the most serious, but rare, is a higher risk for other cancers in the part of your body getting radiation. This is a more significant problem for younger adults and children. Radiation can also cause long-term damage to some organs. For example, radiation to the chest can damage your thyroid gland or your heart. Talk with your healthcare providers about your risks for long-term side effects.