

Radiation Medicine Department

Vulvar Cancer: Treatment

Treatment

There are treatments for all patients with cancer of the vulva. Three kinds of treatment are used:

- Surgery (taking out the cancer in an operation)
- Radiation therapy (using high-dose x-rays or other high-energy rays to kill cancer cells)
- Chemotherapy (using drugs to kill cancer cells)

Surgery

Surgery is the most common treatment of cancer of the vulva. Your doctor may take out the cancer using one of the following operations:

- Wide local excision takes out the cancer and some of the normal tissue around the cancer
- Radical local excision takes out the cancer and a larger portion of normal tissue around the cancer. Lymph nodes may also be removed
- Laser surgery uses a narrow beam of light to remove cancer cells
- If the cancer has spread outside the vulva and the other female organs, your doctor may take out the lower colon, rectum, or bladder (depending on where the cancer has spread) along with the cervix, uterus, and vagina (pelvic exenteration).

Chemotherapy

Chemotherapy uses drugs to kill cancer cells. Drugs may be given by mouth, or they may be put into the body by a needle in the vein or muscle.

Chemotherapy may be given as a systemic treatment - the drug enters the bloodstream, travels through the body, and can kill cancer cells throughout the body. Or, it may be given as a local treatment – the drug affects the tissue that it is applied to, but will not reach the bloodstream.

Radiation Therapy

There are two types of radiation therapy.

External Radiation Therapy

External radiation therapy uses a machine called a linear accelerator to deliver a uniform dose of high-energy x-ray to the region of the tumor. These x-rays can destroy the cancer cells, while sparing the surrounding normal tissue.

The linear accelerator uses microwave technology (similar to that used for radar) to accelerate electrons in a part of the accelerator called the wave guide and then allows these electrons to collide with a heavy metal target. As a result of these collisions, high energy x-rays are scattered from the target.

A portion of these x-rays is collected and then shaped to form a beam that matches the tumor. The beam comes out of a part of the accelerator called a gantry, which rotates around the patient. The patient lies on a movable treatment couch and lasers are used to make sure you are in the proper position.

Radiation can be delivered to the tumor from any angle by rotating the gantry and moving the treatment couch.

External beam therapy is painless. You do not see or feel the actual treatment. Most patients are treated on an outpatient basis, coming from and returning home after each treatment. Most people can even continue with their normal daily activities.

Internal Radiation Therapy (Brachytherapy)

Brachytherapy involves placing radiation sources as close as possible to the tumor site. Sometimes, they may be inserted directly into the tumor. The radioactive sources or isotopes are in the form of wires, seed, (or molds), or rods.

In some instances, brachytherapy may be used in conjunction with external beam therapy. When both forms are employed, the external beam radiation is intended to destroy cancerous cells in a large area surrounding the tumor, while the brachytherapy delivers a boost, or higher dose of radiation, to help destroy the main concentrated mass of tumor cells.

Side Effects of Radiation Therapy

Because treatment may damage healthy cells and tissues, unwanted side effects are common. These side effects depend on many factors, including the location of the tumor and the type and extent of the treatment.

Side effects may not be the same for each person, and they may even

