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Treating Vulvar Cancer

If you've been diagnosed with vulvar cancer, your cancer care team will discuss your treatment options with you. It's important to weigh the benefits of each treatment option against the possible risks and side effects.

How are vulvar cancers and pre-cancers treated?

For pre-cancers (vulvar intraepithelial neoplasia or VIN), topical treatments can be used. For vulvar cancers, there are 3 main types of treatment.

- Topical Therapy for Vulvar Pre-Cancer
- Surgery for Vulvar Cancer
- Radiation Therapy for Vulvar Cancerar Cm /F1 12 Tf 0 0 0318.52 /GS6 gs (against the poss172 6

- A gynecologist: a doctor who specializes in diseases of the female reproductive tract
- A gynecologic oncologist: a doctor who specializes in treating cancers of the female reproductive system (including surgery and chemotherapy)
- A radiation oncologist: a doctor who uses radiation to treat cancer
- A medical oncologist: a doctor who uses chemotherapy and other medicines to treat cancer

Many other specialists may be involved in your care as well, including nurse practitioners, nurses, psychologists, social workers, rehabilitation specialists, and other health professionals.

Health Professionals Associated with Cancer Care

Making treatment decisions

It's important to discuss all of your treatment options as well as their possible side effects with your family and your treatment team to make the choice that best fits your needs. If there's anything you don't understand, ask to have it explained.

If time permits, it is often a good idea to seek a second opinion. A second opinion can give you more information and help you feel more confident about the treatment plan you choose.

- Questions to Ask Your Doctor About Vulvar Cancer
- Seeking a Second Opinion

Thinking about taking part in a clinical trial

Clinical trials are carefully controlled research studies that are done to get a closer look at promising new treatments or procedures. Clinical trials are one way to get state-of-the art cancer treatment. In some cases they may be the only way to get access to newer treatments. They are also the best way for doctors to learn better methods to treat cancer. Still, they're not right for everyone.

If you would like to learn more about clinical trials that might be right for you, start by asking your doctor if your clinic or hospital conducts clinical trials.

Clinical Trials

Considering complementary and alternative methods

You may hear about alternative or complementary methods that your doctor hasn't mentioned to treat your cancer or relieve symptoms. These methods can include vitamins, herbs, and special diets, or other methods such as acupuncture or massage, to name a few.

Complementary methods refer to treatments that are used along with your regular medical care. Alternative treatments are used instead of a doctor's medical treatment. Although some of these methods might be helpful in relieving symptoms or helping you feel better, many have not been proven to work. Some might even be harmful.

Be sure to talk to your cancer care team about any method you are thinking about using. They can help you learn what is known (or not known) about the method, which can help you make an informed decision.

Complementary and Integrative Medicine

Help getting through cancer treatment

People with cancer need support and information, no matter what stage of illness they may be in. Knowing all of your options and finding the resources you need will help you make informed decisions about your care.

Whether you are thinking about treatment, getting treatment, or not being treated at all, you can still get supportive care to help with pain or other symptoms. Communicating with your cancer care team is important so you understand your diagnosis, what treatment is recommended, and ways to maintain or improve your quality of life.

Different types of programs and support services may be helpful, and can be an important part of your care. These might include nursing or social work services, financial aid, nutritional advice, rehab, or spiritual help.

The American Cancer Society also has programs and services – including rides to treatment, lodging, and more – to help you get through treatment. Call our National Cancer Information Center at 1-800-227-2345 and speak with one of our trained specialists.

- Palliative Care
- Find Support Programs and Services in Your Area

Choosing to stop treatment or choosing no treatment at all

For some people, when treatments have been tried and are no longer controlling the cancer, it could be time to weigh the benefits and risks of continuing to try new treatments. Whether or not you continue treatment, there are still things you can do to help maintain or improve your quality of life.

Some people, especially if the cancer is advanced, might not want to be treated at all. There are many reasons you might decide not to get cancer treatment, but it's important to talk to your doctors and you make that decision. Remember that even if you choose not to treat the cancer, you can still get supportive care to help with pain or other symptoms.

If Cancer Treatments Stop Working

the lymph nodes in the groin often led to disabling swelling of the leg (<u>lymphedema</u>²) on that side.

Today, the importance of quality of life and sexuality is well recognized. Doctors have also learned that, when cancer is found early, there's no need to remove so much surrounding healthy tissue. Also, the sentinel node biopsy procedure is an option to removing many lymph nodes if the cancer has not spread (this is discussed below).

Still, when cancer is more advanced, an extensive procedure may be necessary. In some cases, radiation can be combined with chemotherapy and surgery to kill more cancer cells in advanced cancers.

Vulva surgery

The following types of surgery are listed in order of how much tissue is removed from the vulva (from least to most):

Laser surgery

A focused laser beam vaporizes (burns off) the layer of vulvar skin containing abnormal cells. Laser surgery may be used as a treatment for VIN (vulvar pre-cancer). It's not used to treat invasive cancer.

Excision

The cancer and an edge (margin) of normal, healthy skin (usually at least ½ inch) around it and a thin layer of fat below it are excised (cut out). This is sometimes called wide local excision. If extensive (a lot of tissue is removed), it may be called a **simple** partial vulvectomy.

Vulvectomy

In this type of operation, all or part of the vulva is removed.

- A **skinning vulvectomy** removes only the top layer of skin affected by the cancer. This is an option for treating extensive VIN, but this operation is rarely done.
- In a **simple vulvectomy**, the entire vulva is removed (the inner and outer labia; sometimes the clitoris, too) as well as tissue just under the skin.
- A partial or modified radical vulvectomy removes part of the vulva, including the deep tissue.

• In a **complete radical vulvectomy**, the entire vulva and deep tissues, including the clitoris, are removed. A complete radical vulvectomy rarely needed.

Vulvar reconstruction

Sometimes these procedures remove a large area of skin from the vulva, requiring skin grafts from other parts of the body to cover the wound. But, most of the time the surgical wounds can be closed without grafts and still provide a very satisfactory appearance. If a skin graft is needed, the gynecologic oncologist may do it. Otherwise, it may be done by a plastic/reconstructive surgeon after the vulvectomy.

Reconstructive surgery is available for women who have had more extensive surgery. A reconstructive surgeon can take a piece of skin and underlying fatty tissue and sew it into the area where the cancer was removed. Several sites in the body can be used, but it's complicated by the fact that the blood supply to the transplanted tissue needs to be kept intact. This is where a skillful surgeon is needed because the tissue must be moved without damaging the blood supply. If you're having flap reconstruction, ask the

Lymph node surgery

Because vulvar cancer often spreads to <u>lymph nodes</u>⁵ in the groin, these may need to be removed. Treating the lymph nodes is important when it comes to the risk of cancer coming back and long-term outcomes. Still, there's no one best way to do this. Talk to your doctor about what's best for you, why it's best, and what the treatment side effects might be.

Inguinal lymph node dissection

Surgery to remove lymph nodes in the groin is called an **inguinal lymph node dissection**. Usually only lymph nodes on the same side as the cancer are removed. If the cancer is in or near the middle, then both sides may have to be done.

In the past, the incision (cut in the skin) that was used to remove the cancer in the vulva was made larger to remove the lymph nodes, too. Now, doctors remove the lymph nodes through a separate incision about 1 to 2 cm (less than ½ to 1 inch) below and parallel to the groin crease. The incision is deep, down through membranes that cover the major nerves, veins, and arteries. This exposes most of the inguinal lymph nodes, which are then removed as a solid piece. A major vein, the saphenous vein, may or may not be closed off by the surgeon. Some surgeons will try to save it in an effort to reduce leg swelling (lymphedema) after surgery, but some doctors will not try to save the vein since the problem with swelling is mainly caused by the lymph node removal.

After the surgery, a drain is placed into the incision and the wound is closed. The drain stays in until it's not draining much fluid.

Sentinel lymph node biopsy

This procedure can help some women avoid having a full inguinal node dissection. It's used to find and remove the lymph nodes that drain the area where the cancer is. These lymph nodes are known as **sentinel lymph nodes** because cancer would be expected to spread to them first. The lymph nodes that are removed are then looked at under the microscope to see if they contain cancer cells. If they do, then the rest of the lymph nodes in this area need to be removed. If the sentinel nodes do not contain cancer cells, further lymph node surgery isn't needed. This procedure can be used instead of an inguinal lymph node dissection 0 g memb 1 72 247.8 Tm 0 0 9vc biopsy

identify the side (left or right) that picks up the radioactive material. This is the side where the lymph nodes will be removed. During the surgery to remove the cancer, blue dye will be injected again into the tumor site. This allows the surgeon to find the sentinel node by its blue color and then remove it. Sometimes 2 or more lymph nodes turn blue and are removed.

If a lymph node near a vulvar cancer is abnormally large, it's more likely to contain cancer and a sentinel lymph node biopsy is usually not done. Instead, a fine needle It may be difficult for women who have had a vulvectomy to reach orgasm. The outer genitals, especially the clitoris, are important in a woman's sexual pleasure. For many women, the vagina is just not as sensitive. Women may also notice numbness in their genital area after a radical vulvectomy, but feeling might return over the next few months as nerves slowly heal.

When touching the area around the vagina, and especially the urethra, a light caress and the use of a lubricant can help prevent painful irritation. If scar tissue narrows the entrance to the vagina, penetration may be painful. Vaginal dilators can sometimes help stretch the opening. When scarring is severe, the surgeon can sometimes use skin grafts to widen the entrance. Sometimes, a special type of physical therapy called **pelvic floor therapy** may help.

More information about Surgery

For more general information about surgery as a treatment for cancer, see <u>Cancer Surgery</u>⁸.

To learn about some of the side effects listed here and how to manage them, see <u>Managing Cancer-related Side Effects</u>⁹.

Hyperlinks

- 1. www.cancer.org/cancer/vulvar-cancer/about/what-is-vulvar-cancer.html
- 2. <u>www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/lymphedema.html</u>
- 3. <u>www.cancer.org/treatment/treatments-and-side-effects/treatment-types/surgery/ostomies/urostomy.html</u>
- 4. <u>www.cancer.org/treatment/treatments-and-side-effects/treatment-types/surgery/ostomies/colostomy.html</u>
- 5. <u>www.cancer.org/treatment/understanding-your-diagnosis/lymph-nodes-and-cancer.html</u>
- 6. <u>www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/lymphedema.html</u>
- 7. <u>www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/fertility-and-sexual-side-effects/sexuality-for-women-with-cancer.html</u>
- 8. <u>www.cancer.org/treatment/treatments-and-side-effects/treatment-types/surgery.html</u>
- 9. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects.html

Radiation can also be used after surgery to kill any cancer cells that might have been left behind.

Radiation alone may be used to treat <u>lymph nodes</u>¹ in the groin and pelvis.

It also may be used with or without chemo as the main treatment for women who are not well enough to have surgery.

Types of external beam radiation therapy

There are ways to give EBRT so that the radiation is focused more precisely on the tumor. This let doctors give higher doses of radiation to the tumor while reducing the radiation exposure to nearby healthy tissues.

Three-dimensional conformal radiation therapy (3D-CRT)

3D-CRT uses special computers to precisely map the location of the tumor. Radiation beams are then shaped and aimed at it from several directions, which makes it less likely to damage normal tissues.

Intensity modulated radiation therapy (IMRT)

IMRT is an advanced form of 3D therapy. It uses a computer-driven machine that moves around the patient as it delivers radiation. Along with shaping the beams and aiming them at the tumor from several angles, the intensity (strength) of the beams can be adjusted to limit the doses reaching nearby normal tissues, like the bones, bowel, rectum, and bladder. This lets doctors deliver an even higher dose to the cancer.

Side effects of radiation therapy

Common short-term <u>side effects</u>² of radiation therapy to the pelvis include:

- **Tiredness** can become severe a few weeks after treatment begins. Diarrhea, nausea, and vomiting from radiation can usually be controlled with medicines.
- **Skin changes** are common in the area the radiation passes through to reach the cancer. This can range from mild, temporary redness to blistering and permanent discoloration.
- Radiation can cause the vulvar area to become sensitive and sore. The skin may release fluid, which can lead to infection, so the area exposed to radiation must be

carefully cleaned and protected.

- Radiation can also lead to low blood counts, causing anemia (low red blood cells)
 and neutropenia (low white blood cells). Low red blood cell counts can lead to
 feeling tired and short of breath. Low white blood cells can increase the risk of
 serious infection. The blood counts usually return to normal over time after radiation
 is stopped.
- Women who receive radiation to the inguinal (groin) area after a lymph node dissection may have problems with the surgical wound site. It may open up or have trouble healing.
- Radiation to the lymph nodes can lead to poor fluid drainage from the legs. The
 fluid can build up and lead to severe leg swelling that doesn't go down at night. This
 is called lymphedema. Information about lymphedema and how to manage it can
 be found in Lymphedema³.

These side effects tend to be worse when chemotherapy is given with radiation. If you have side effects from radiation, tell your cancer care team. There are often ways to relieve them.

More information about radiation therapy

To learn more about how radiation is used to treat cancer, see Radiation Therapy⁴.

To learn about some of the side effects listed here and how to manage them, see Managing Cancer-related Side Effects⁵.

Hyperlinks

- www.cancer.org/treatment/understanding-your-diagnosis/lymph-nodes-andcancer.html
- 2. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects.html
- 3. <u>www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/lymphedema.html</u>
- 4. <u>www.cancer.org/treatment/treatments-and-side-effects/treatment-types/radiation.html</u>
- 5. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects.html

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Forner DM, Mallmann P. Neoadjuvant and definitive chemotherapy or chemoradiation for stage III and IV vulvar cancer: A pooled Reanalysis. *Eur J Obstet Gynecol Reprod Biol.* 2017;212:115-118.

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Rao YJ, Chin RI, Hui C, et al. Improved survival with definitive chemoradiation compared to definitive radiation alone in squamous cell carcinoma of the vulva: A review of the National Cancer Database. *Gynecol Oncol.* 2017;146(3):572-579.

Rao YJ, Chundury A, Schwarz JK, et al. Intensity modulated radiation therapy for squamous cell carcinoma of the vulva: Treatment technique and outcomes. *Adv Radiat Oncol*. 2017;2(2):148-158.

See all references for Vulvar Cancer (www.cancer.org/cancer/vulvar-cancer/references.html)

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Chemotherapy for Vulvar Cancer

Chemotherapy (chemo) uses anti-cancer drugs that are usually given intravenously (IV

The role of chemo in treating vulvar cancer is not clear. There are no standard chemo treatment plans.

In more advanced disease, chemo might be given with radiation therapy before surgery. Chemotherapy helps the radiation work better, and this may shrink the tumor so it's easier to remove with surgery.

At this time, chemo is most often used for vulvar cancers that have spread or have come back after surgery. But so far, the results of using chemo to treat vulvar cancers that have spread to other organs have been disappointing.

Common chemo drugs used for vulvar cancer

Drugs most often used in treating vulvar cancer include cisplatin with or without fluorouracil (5-FU). Another chemo drug, mitomycin, is less commonly used. These are often given at the same time as radiation therapy. (You may hear this called **chemoradiation**.)

More advanced vulvar cancers may be treated with one or more of these drugs:

- Cisplatin
- Carboplatin
- Vinorelbine
- Paclitaxel
- Erlotinib

Different drugs are used to treat vulvar melanoma. <u>Melanoma Skin Cancer</u>¹ has more information on drug treatment for advanced melanomas.

Chemo side effects

Many of the chemo drugs used work by attacking cells that are rapidly dividing. This is helpful in killing cancer cells, but these drugs can also affect normal cells, leading to side effects. Side effects² of chemo depend on the type of drugs, the amount taken, and the length of time you are treated. Common side effects of some of the drugs used to treat vulvar cancer include:

- Nausea and vomiting
- · Loss of hair

4. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects.html

References

Forner DM, Mallmann P. Neoadjuvant and definitive chemotherapy or chemoradiation for stage III and IV vulvar cancer: A pooled Reanalysis. *Eur J Obstet Gynecol Reprod Biol.* 2017;212:115-118.

Martinez-Castro P, Poveda A, Guinot JL, Minig L. Treatment of Inoperable Vulvar Cancer: Where We Come From and Where Are We Going. *Int J Gynecol Cancer*. 2016;26(9):1694-1698.

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Soderini A, Aragona A, Reed N. Advanced Vulvar Cancers: What are the Best Options for Treatment? *Curr Oncol Rep.* 2016;18(10):64.

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Topical Therapy for Vulvar Pre-Cancer

Topical therapy means the drug is a cream or ointment put right onto the cancer. This is a way to treat <u>vulvar intraepithelial neoplasia</u>¹ (VIN), but it's not used to treat invasive vulvar cancer. Topical chemotherapy for VIN does not work as well as <u>laser treatment</u>² or surgery.

One choice is to apply the chemotherapy drug, fluorouracil (5-FU), directly to the skin of the vulva. This is called **topical chemotherapy**. Chemotherapy applied directly to the skin as an ointment will cause local irritation and peeling. This is normal and is part of the local destruction of cancer cells. Other medicated ointments suggested by your health care team can help relieve the discomfort of this treatment.

A second drug that can be used topically is called imiquimod. This drug comes as a cream to be applied to the area of VIN. Imiquimod is not a chemotherapy drug. Instead,

it works by boosting the body's immune response to the area of abnormal tissue. This treatment has improved VIN, and in some women, it has made VIN go away completely.

treatment in a <u>clinical trial</u>³ should be considered. This way women can get the best treatment available now and may also get the treatments that are thought to be even better.

Stage II cancers have spread to structures near the vulva, such as the anus, the lower vagina, and/or the lower urethra. One option for treatment is partial radical vulvectomy (removal of the tumor, nearby parts of the vulva, and other tissues containing cancer). Surgery may also include removal of the lymph nodes in the groin on both sides of the body (or sentinel node biopsies). Radiation therapy may be given after surgery if cancer cells are at or near the margins (edges of the tissue removed by surgery).

For women who are too sick or weak from other medical problems to have surgery, radiation (with or without chemotherapy) may be used as the main treatment.

lymph nodes that has caused the lymph nodes to become fixed (stuck to the underlying tissue) or ulcerated (become open sores). These cancers are often treated with radical vulvectomy and removal of the groin lymph nodes. Radiation (often with chemo) may be given either before or after surgery.

Stage IVB

These cancers have spread to lymph nodes in the pelvis or to organs and tissues outside the pelvis (like the lungs or liver). There is no standard treatment for them. Surgery is not expected to cure these cancers, but may be helpful in relieving symptoms, such as bowel or bladder blockages. Radiation may also be helpful in shrinking the cancer and improving symptoms. Chemo may also be an option. Experts recommend that these women enroll in a clinical trial⁶.

Recurrent vulvar cancer

When cancer comes back after treatment, it's called **recurrent cancer**. Treatment options depend on how soon the cancer comes back and whether the recurrence is local (in the vulva), regional (in nearby lymph nodes), or distant (has spread to organs such as the lungs or bones).

If the recurrence is local, it may still be possible to remove the cancer by surgery or by using combinations of chemo, radiation therapy, and surgery.

When the cancer has grown too large or spread too far to be surgically removed (it's unresectable), chemo and/or radiation therapy may be used to help relieve symptoms such as pain, or to shrink the tumor so that surgery may become an option. If treatment is given only to relieve pain or bleeding, it's called <u>palliative (symptom relief) therapy</u>⁷.

It's very important to understand that palliative treatment is not expected to cure a cancer. Women with advanced vulvar cancer are encouraged to enter a <u>clinical</u> <u>trial</u>⁸ where they may get new treatments that might be helpful but are as yet unproven.

Hyperlinks

- 1. www.cancer.org/cancer/vulvar-cancer/detection-diagnosis-staging/staging.html
- 2. www.cancer.org/cancer/vulvar-cancer/about/what-is-vulvar-cancer.html
- 3. www.cancer.org/treatment/treatments-and-side-effects/clinical-trials.html
- 4. www.cancer.org/cancer/vulvar-cancer/about/what-is-vulvar-cancer.html
- 5. www.cancer.org/treatment/understanding-your-diagnosis/tests/testing-biopsy-and-

If <u>Paget's disease</u>¹ is present and there's no <u>invasive adenocarcinoma</u>², treatment is

- How deep the melanoma is
- Where it is on the skin of the vulva
- Whether it's ulcerated (an open sore)
- Spread to lymph nodes

The cancer stage and the woman's age and personal preferences are also key.

If the melanoma has spread outside the vulva, other treatments may be needed. More on treatment of vulvar melanoma can be found in Melanoma Skin Cancer².

Hyperlinks

- 1. <u>www.cancer.org/treatment/treatments-and-side-effects/treatment-types/immunotherapy.html</u>
- 2. www.cancer.org/cancer/melanoma-skin-cancer/treating.html

References

Campaner AB, Fernandes GL, Cardosa FA, Veasey JV. Vulvar melanoma: relevant aspects in therapeutic management. *An Bras Dermatol.* 2017;92(3):398-400.

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See all references for Vulvar Cancer_(www.cancer.org/cancer/vulvar-cancer/references.html)

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