

Treating Vaginal Cancer

If you've been diagnosed with vaginal cancer, your cancer care team will discuss your treatment options with you. It's important that you think carefully about each of your choices. Weigh the benefits of each treatment option against the possible risks and side effects.

Treatments for vaginal pre-cancers

Some treatments are only used to treat pre-cancers of the vagina (vaginal intraepithelial neoplasia or, VAIN).

Many cases of low-grade VAIN will go away on their own, so some doctors will choose to watch them closely without starting treatment. If the area of VAIN doesn't go away or gets worse, treatment is usually started. Higher grade VAIN is not likely to go away on its own, so treatment is usually started right away.

Common treatment approaches

Depending on the type and stage of your vaginal cancer, you may need more than one type of treatment.

• Treatment Options for Vaginal Cancer, by Stage and Type

Who treats vaginal cancer?

Based on your treatment options, you might have different types of doctors on your treatment team. These doctors could include:

- A **gynecologist:** a doctor who specializes in diseases of the female reproductive tract
- A **gynecologic oncologist:** a doctor who specializes in the treatment of 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

You might have many other specialists on your treatment team as well, including physician assistants (PAs), nurse practitioners (NPs), nurses, psychologists, nutritionists, social workers, and other health professionals.

Health Professionals Who Are Part of a Cancer Care Team

Making treatment decisions

Your treatment will depend on the type and stage of your cancer, but other factors might also play a part in choosing the best treatment plan. These could include your age, your overall health, whether you plan to have children, and your personal preferences. Be sure you understand the risks and side effects of all the options before making a decision about treatment. Ask questions if there's anything you're not sure about.

Vaginal cancer can affect your sex life and your ability to have children, so these concerns should also be considered as you make treatment decisions.

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 Vaginal Cancer
- Fertility and Sexual Side Effects
- <u>Seeking a Second Opinion</u>

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-ofthe 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.

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.

<u>Clinical Trials</u>

Considering complementary, integrative, and alternative methods

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

Complementary methods are treatments that are used **along with** your regular medical care. **Alternative** treatments are used **instead of** standard meg /GS10 gs0 5clinicalard 5 j 0

home a workable option for many families.

- If Cancer Treatments Stop Working
- Hospice Care

The treatment information given here is not official policy of the American Cancer Society and is not intended as medical advice to replace the expertise and judgment of your cancer care team. It is intended to help you and your family make informed decisions, together with your doctor. Your doctor may have reasons for suggesting a treatment plan different from these general treatment options. Don't hesitate to ask your cancer care team any questions you may have about your treatment options.

Laser Surgery for Vaginal Pre-Cancer

In laser surgery (also called **laser ablation**), a beam of high-energy light is used to vaporize (dissolve) abnormal tissue. Laser surgery is done in the clinic setting and the person usually is able to go home the same day. Side effects can include vaginal discharge, vaginal bleeding, and cramping similar to that of a menstrual period.

Laser surgery typically is not a treatment for invasive cancer. For laser surgery to f/F2u 314.T 1 0 0 1 72 /stsded your/GSI1 gs (14.T 1 surger8aour/ /<u>3kesi</u>milar to that of a men51 7was/

response to the area of abnormal tissue. This treatment has led to improvement of VAIN (the lesions changed from VAIN 2 or 3 to VAIN 1). In about half of women with VAIN 1 or 2, it has caused VAIN to go away.

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Radiation Therapy for Vaginal Cancer

More information about radiation therapy

How is radiation used to treat vaginal cancer?

There are 2 ways to treat vaginal cancer with radiation:

- External beam radiation therapy
- Intracavity (in the body cavity) brachytherapy (also called **internal radiation therapy**).

Vaginal cancer is most often treated with acombination of both external and internal radiation with or without low doses of chemotherapy.

External beam radiation therapy/ Intensity-modulated radiation therapy (EBRT/IMRT)

EBRT is radiation delivered from outside the body. It's a lot like getting an x-ray.

IMRT is a type of EBRT, where radiation beams change strength depending on where they hit the tumor; this helps lessen damage to nearby normal body tissues.

EBRT/IMRT can be used for vaginal cancer in a few different ways:

- For Stage I: EBRT/IMRT is commonly given alone, then followed by intracavitary brachytherapy.
- For Stages II through Stage IVA: EBRT/IMRT is commonly given with chemotherapy, then followed by intracavitary brachytherapy.

Intracavitary brachytherapy

Another way to deliver radiation is to place radioactive material inside the vagina. There are 2 main types of intracavitary brachytherapy:

• Low dose rate (LDR) brachytherapy: The radioactive material is inside a cylinder-

shaped container that's put in the vagina. It stays in place for a day or 2. Gauze packing helps hold the cylinder in place, but you have to stay in bed in the hospital during the treatment.

• High dose rate (HDR) brachytherapy: The radiation source is in a cylinder, but it doesn't need to stay in place for long. This means it can be given in an outpatient setting. Typically, 3 or 4 treatments are given 1 or 2 weeks apart.

When given this way, the radiation mainly affects the tissue touching the cylinder. This means the radiation is less likely to cause bladder and bowel side effects.

Another type of brachytherapy, called **interstitial radiation**, uses radioactive material inside needles that are put right into the tumor and nearby tissues.

Side effects of radiation therapy

Radiation can destroy nearby healthy tissue along with the cancer cells. Side effects depend on the area being treated, the amount of radiation, and the way the radiation is given. Side effects tend to be more severe for external beam radiation than for brachytherapy.

Short-term side effects

Common short-term side effects of radiation therapy include:

- Tiredness, which may get worse about 2 weeks after treatment begins and get better over time after treatment ends
- Nausea and vomiting (more common if radiation is given to the belly or pelvis)
- Diarrhea (more common if radiation is given to the belly or pelvis)
- Skin changes in the area where the radiation is given, which can range from mild redness to blistering and peeling. The skin may become raw and tender.
- Low blood counts

The diarrhea caused by radiation can usually be controlled with over-the-counter medicines. Nausea and vomiting can be treated with medicines from your doctor. Skin that becomes raw and tender needs to be kept clean and protected to prevent infection.

Side effects tend to be worse when chemotherapy is given with radiation.

Hyperlinks

- 1. <u>www.cancer.org/cancer/managing-cancer/side-effects/fertility-and-sexual-side-effects/sexuality-for-women-with-cancer.html</u>
- 2. www.cancer.org/cancer/managing-cancer/treatment-types/radiation.html
- 3. www.cancer.org/cancer/managing-cancer/side-effects.html

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Last Revised: September 23, 2024

Surgery for Vaginal Cancer

Usually, surgery is only used for very early-stage vaginal cancers and for cancers that were not cured with radiation. The extent of the surgery depends on the size, location, and stage of the cancer. Surgery may be the only treatment needed for a very small vaginal cancer.

Hysterectomy

Sometimes to remove a vaginal cancer, the uterus and cervix must be removed, as well as all or part of the vagina. This operation is called a **hysterectomy** or total hysterectomy (TH).

The fallopian tubes and ovaries are often removed in the same operation. This procedure is known as a **bilateralsalpingo-oophorectomy** (or BSO). You may see the abbreviation TAHBSO, which stands for **total abdominalhysterectomy bilateral salpingo-oophorectomy**.

In some cases, the connective tissue that surrounds and supports the uterus is also removed. This is called a **radical hysterectomy**. If you have a radical hysterectomy, you may need to have a catheter drain your bladder for a short time after surgery. This is because some of the nerves to the bladder can be damaged or removed.

In either case, there are 2 main ways to remove the uterus:

- Removing the uterus through the vagina is called a vaginal hysterectomy (or VH).
- Removing the uterus through an incision (cut) in the abdomen (belly) is called an abdominal hysterectomy(or totalabdominal hysterectomy; TAH).

For an abdominal hysterectomy, sometimes special procedures are used to avoid making a large cut in the abdomen:

- Laparoscopic hysterectomy: Often these surgeries are done through very small surgical incisions (cuts) on the abdomen. A laparoscope, a thin lighted tube with a camera, is put through one of the cuts to see inside the abdomen and pelvis. Small instruments can be controlled through the tube or used in other small cuts to do the surgery. This lets the surgeon avoid making a large cut in the abdomen.
- **Robot-assisted surgery:** Many surgeries use a robotic interface. For this, the surgeon sits at a panel near the operating table and controls tools on robotic arms to operate through small cuts in the abdomen/pelvis.

Your doctor will talk to you about the approach that's best for you before surgery is planned.

Vaginal reconstruction

If all or most of the vagina must be removed, it might be possible to reconstruct (rebuild) a vagina with tissue from another part of the body. This would allow a person to have sex after surgery. A new vagina can be surgically created out of skin, intestinal tissue, or myocutaneous (muscle and skin) grafts.

A reconstructed vagina needs special care. See <u>Sex and the Woman With Cancer</u>⁴ to learn more.

Surgery to remove lymph nodes (lymphadenectomy)

Surgery to remove <u>lymph nodes</u>⁵ is called **lymphadenectomy** or **lymph node dissection**.

For vaginal cancer, lymph nodes in the groin area (inguinal lymph nodes) or inside the pelvis near the vagina (pelvic lymph nodes) may be taken out to check for cancer spread (metastasis). This is generally done for patients with very early-stage vaginal cancer.

Removing lymph nodes in the groin or pelvis can cause poor fluid drainage from the legs. The fluid builds up, leading to severe leg swelling. This is called **lymphedema**. This is a more common development if radiation is given after surgery. Chemotherapy after surgery is also linked to an increased risk.

Support stockings or special compression devices may help reduce swelling. People with lymphedema need to be very careful to avoid infection in the affected leg or legs.

More information on preventing and managing this problem can be found in <u>Lymphedema⁶</u>.

Pelvic exenteration

Pelvic exenteration is a major operation that includes vaginectomy, removing the pelvic lymph nodes, and removing one or more of the following: the lower colon, rectum, bladder, uterus, and/or cervix. How much has to be removed depends on how far the cancer has spread.

If the bladder is removed, a new way to store and get rid of urine is needed. Usually, a short piece of intestine is used to function as a new bladder. This may be connected to the abdominal (belly) wall with a small opening called a **urostomy**. Urine can then be drained out when a catheter is put into the urostomy. Or urine may drain continuously into a small plastic bag that sticks to the abdomen over the opening. More information

- 2. www.cancer.org/cancer/diagnosis-staging/lymph-nodes-and-cancer.html
- 3. <u>www.cancer.org/cancer/types/cervical-cancer/treating/surgery.html</u>
- 4. <u>www.cancer.org/cancer/managing-cancer/side-effects/fertility-and-sexual-side-effects/sexuality-for-women-with-cancer.html</u>
- 5. www.cancer.org/cancer/diagnosis-staging/lymph-nodes-and-cancer.html
- 6. www.cancer.org/cancer/managing-cancer/side-effects/swelling/lymphedema.html
- 7. <u>www.cancer.org/cancer/managing-cancer/treatment-</u> types/surgery/ostomies/urostomy.html
- 8. <u>www.cancer.org/cancer/managing-cancer/treatment-</u> <u>types/surgery/ostomies/colostomy.html</u>
- 9. www.cancer.org/cancer/managing-cancer/treatment-types/surgery.html
- 10. <u>www.cancer.org/cancer/managing-cancer/side-effects.html</u>

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Last Revised: September 23, 2024

Chemotherapy for Vaginal Cancer

Because vaginal cancer is relatively uncommon, much of the chemo decision-making for treatment of vaginal cancer is based on cervical cancer studies. To treat vaginal cancer, chemo can be given:

• At the same time as radiation (for disease that has not spread to other parts of the body)

• Fluorouracil (5-FU)

Chemo side effects

Chemo drugs 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 some side effects.

Side effects of chemo depend on the type of drugs, the amount taken, and the length of time you are treated. Common side effects include:

- Hair loss
- Mouth sores
- Loss of appetite
- Diarrhea
- Nausea and vomiting
- Changes in the menstrual cycle, premature menopause, and infertility (inability to become pregnant). Most vaginal cancer patients, however, have gone through menopause.

Chemo can also affect the blood-forming cells of the bone marrow, leading to low blood counts. This can cause:

- Increased chance of infections (due to low white blood cells)
- Easy bruising or bleeding (due to low blood platelets)
- Fatigue (due to low red blood cells)

Other side effects can occur depending on which drug is used. For example, cisplatin can cause nerve damage (called **neuropathy**). This can lead to numbness, tingling, or even pain in the hands and feet.

Most side effects are temporary and stop when the treatment is over, but chemo drugs can have some long-lasting or even permanent effects.

Long-term side effects of chemotherapy can include:

Menstrual changes: If you are younger and have not had your uterus removed as a part of treatment, changes in menstrual periods are a common side effect of chemo. But even if your periods stop while you are on chemo, you might still be able to get

1. <u>www.cancer.org/cancer/managing-cancer/treatment-types/chemotherapy.html</u>

2. <u>www.cancer.org/cancer/managing-cancer/side-effects.html</u>

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Targeted Drug Therapy for Vaginal Cancer

- Antibody-drug conjugates
- RET inhibitors
- NTRK inhibitors
- More information about targeted therapy

Antibody-drug conjugates

To learn more about how targeted drugs are used to treat cancer, see <u>Targeted Cancer</u> <u>Therapy</u>².

To learn about some of the side effects listed here and how to manage them, see <u>Managing Cancer-related Side Effects</u>³.

Hyperlinks

- 1. www.cancer.org/cancer/types/cervical-cancer/treating/immunotherapy.html
- 2. www.cancer.org/cancer/managing-cancer/treatment-types/targeted-therapy.html
- 3. www.cancer.org/cancer/managing-cancer/side-effects.html

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Last Revised: September 23, 2024

Immunotherapy for Vaginal Cancer

Immunotherapy uses medicines to help a person's immune system better recognize and

destroy cancer cells. Many types of immunotherapy are being tested in <u>clinical trials</u>¹, and some are used to treat vaginal cancer.

- Immune checkpoint inhibitors
- Possible side effects of immune checkpoint inhibitors
- More information about immunotherapy

Immune checkpoint inhibitors

This drug is given as an intravenous (IV) infusion, typically once every 3 or 6 weeks.

Nivolumab (Optivo) can be used to treat advanced vaginal cancers after other treatments have been tried if the tumor cells are PD-L1 positive. It is given as an IV infusion, typically once every 2 weeks.

Cemiplimab (Libtayo) was studied in people with cervical cancer. Since vaginal cancer is relatively uncommon, chemo drugs approved for cervical cancer are commonly used to treat vaginal cancer as well.

It can be given to patients with advanced vaginal cancer that recurred (came back) after initial systemic treatment, regardless of their PD-L1 status. This drug is given as an IV infusion, typically once every 3 weeks.

Possible side effects of immune checkpoint inhibitors

Side effects of PD-1 inhibitors can include:

Feeling tired or weak

intestines, liver, hormone-making glands, kidneys, skin, or other organs.

It's very important to report any new side effects to your health care team right away. If you have a serious side effect, treatment may need to be delayed or stopped, and you may be given high doses of corticosteroids to suppress your immune system.

More information about immunotherapy

To learn more about how drugs that work on the immune system are used to treat cancer, see <u>Cancer Immunotherapy</u>².

To learn about some of the side effects listed here and how to manage them, see <u>Managing Cancer-related Side Effects</u>³.

Hyperlinks

- 1. <u>www.cancer.org/cancer/managing-cancer/making-treatment-decisions/clinical-</u> <u>trials.html</u>
- 2. www.cancer.org/cancer/managing-cancer/treatment-types/immunotherapy.html
- 3. www.cancer.org/cancer/managing-cancer/side-effects.html

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Last Revised: June 18, 2024

Treatment Options for Vaginal Cancer, by Stage and Type

The type of treatment your cancer care team recommends depends on the type of vaginal cancer you have, how far the cancer has spread, your overall health, and your preferences.

Because vaginal cancer is rare, it's been hard to study it well. There are no "standard"

• If it comes back in another part of the body, like the liver or lungs, it's called a **distant** recurrence.

A local recurrence of a stage I or stage II vaginal cancer may be treated with radical surgery (such as pelvic exenteration). If the cancer was treated with surgery before, radiation therapy is an option.

Surgery is the usual choice when the cancer comes back after radiation therapy.

Higher-stage cancers are hard to treat when they recur. They usually can't be cured. Care focuses mostly on <u>relieving symptoms</u>⁶, although taking part in a <u>clinical trial</u>⁷ of new treatments may be helpful.

For a distant recurrence, the goal of treatment is to help the patient feel better.

Hyperlinks

- 1. www.cancer.org/cancer/types/vaginal-cancer/about/what-is-vaginal-cancer.html
- 2. <u>www.cancer.org/cancer/types/vaginal-cancer/detection-diagnosis-staging/how-diagnosed.html</u>
- 3. www.cancer.org/cancer/diagnosis-staging/lymph-nodes-and-cancer.html
- 4. <u>www.cancer.org/cancer/managing-cancer/making-treatment-decisions/clinical-</u> <u>trials.html</u>
- 5. www.cancer.org/cancer/survivorship/long-term-health-concerns/recurrence.html
- 6. <u>www.cancer.org/cancer/managing-cancer/palliative-care.html</u>
- 7. <u>www.cancer.org/cancer/managing-cancer/making-treatment-decisions/clinical-</u> <u>trials.html</u>

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