

# **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 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 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.

<u>Complementary and Integrative Medicine</u>

#### 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 they 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 Cancer Knowledge Hub at 1-800-227-2345 and speak with one of our caring, trained cancer helpline specialists. Or, if you prefer, you can use our chat feature on cancer.org to connect with one of our specialists.

- Palliative Care
- Programs & Services

#### 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 as 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 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

intraepithelial neoplasia successfully treated with topical imiquimod: A case report. Mol Clin Oncol. 2020 Sep;13(3):19. doi: 10.3892/mco.2020.2089. Epub 2020 Jul 13. PMID: 32754333; PMCID: PMC7391826.

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# **Radiation Therapy for Vaginal Cancer**

Radiation therapy is the treatment most often used for vaginal cancer. It involves using high-energy rays (such as gamma rays or x-rays) or particles (such as electrons, protons, or neutrons) to kill cancer cells.

- How is radiation used to treat vaginal cancer?
- External beam radiation therapy/ Intensity-modulated radiation therapy (EBRT/IMRT)
- Intracavitary brachytherapy
- Side effects of radiation therapy
- 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 cylindershaped 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

One way to do this is to have vaginal sex at least 3 to 4 times a week. Since this might be uncomfortable while getting cancer treatment (and even after), another option is to use a vaginal dilator. A dilator is a plastic or rubber tube used to stretch out the vagina. It feels much like putting in a large tampon for a few minutes. Even if a woman is not interested in staying sexually active, keeping her vagina normal in size allows comfortable gynecologic exams. This is an important part of follow-up after treatment. Vaginal creams may also be used to relieve dryness and prevent painful sex and help maintain the size of the vagina. Still, vaginal dryness and pain with sex can be long-term side effects from radiation. See <u>Sex and the Woman With Cancer<sup>1</sup></u> to learn more.

# More information about radiation therapy

To learn more about how radiation is used to treat cancer, see <u>Radiation Therapy</u><sup>2</sup>.

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

# **Hyperlinks**

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

#### References

Han K, Viswanathan AN. Brachytherapy in Gynecologic Cancers: Why Is It Underused? *Curr Oncol Rep.* 2016;18(4):26.

Jhingran A. Updates in the treatment of vaginal cancer. Int J Gynecol Cancer. 2022 Mar;32(3):344-351. doi: 10.1136/ijgc-2021-002517. PMID: 35256422; PMCID: PMC8921584.

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National Comprehensive Cancer Network, Clinical Practice Guidelines in Oncology (NCCN Guidelines®), Vaginal Cancer, Version 1.2025 -- March 26, 2024. Accessed at

planned.

## **Vaginal reconstruction**

If all or most of the vagina must be removed, it's possible to reconstruct (rebuild) a vagina with tissue from another part of the body. This allows 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><sup>4</sup> to learn more.

# Surgery to remove lymph nodes (lymphadenectomy)

Surgery to remove <u>lymph nodes</u><sup>5</sup> 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. 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  $\underline{Lymphedema}^{6}$ .

## **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 can be found in <u>Urostomy Guide</u><sup>7</sup>.

If the rectum and part of the colon are removed, a new way to remove solid waste is needed. This is done by attaching the remaining intestine to the abdominal wall so that stool can pass through a small opening (called a **colostomy**) into a small plastic bag that sticks to the abdomen. More details can be found in <u>Colostomy Guide</u><sup>8</sup>. Sometimes it's possible to remove a piece of the colon and then reconnect it. In that case, no bags are needed.

Pelvic exenteration is rarely needed to treat vaginal cancer – radiation therapy is usually used first, and then less extensive surgery might be all that's needed. Still, this procedure might be used for vaginal cancers that have come back after treatment with radiation therapy. It's also sometimes needed to treat vaginal cancers when radiation therapy can't be used, for instance, if you have been treated with radiation for cervical cancer in the past. This is because treating the same area with radiation more than once can cause severe problems.

## More information about Surgery

For more general information about surgery as a treatment for cancer, see <u>Cancer</u> <u>Surgery</u><sup>9</sup>.

To learn about some of the side effects listed here and how to manage them, see <u>Managing Cancer-related Side Effects</u><sup>10</sup>.

# **Hyperlinks**

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

- 8. <u>www.cancer.org/cancer/managing-cancer/treatment-</u> <u>types/surgery/ostomies/colostomy.html</u>
- 9. <u>www.cancer.org/cancer/managing-cancer/treatment-types/surgery.html</u>
- 10. www.cancer.org/cancer/managing-cancer/side-effects.html

#### References

Adams TS, Rogers LJ, Cuello MA. Cancer of the vagina: 2021 update. Int J Gynaecol Obstet. 2021 Oct;155 Suppl 1(Suppl 1):19-27. doi: 10.1002/ijgo.13867. PMID: 34669198; PMCID: PMC9298013.

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Kulkarni A, Dogra N, Zigras T. Innovations in the Management of Vaginal Cancer. Curr Oncol. 2022 Apr 27;29(5):3082-3092. doi: 10.3390/curroncol29050250. PMID: 35621640; PMCID: PMC9139564.

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# **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. For treatment of vaginal cancer, chemo can be given:

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

- Before surgery, to shrink the tumor before surgery (this is called **neoadjuvant chemo**).
- How is chemo used to treat vaginal cancer?
- Chemo drugs commonly used for vaginal cancer
- Chemo side effects
- More information about chemotherapy

#### How is chemo used to treat vaginal cancer?

Chemotherapy (chemo) drugs may be given intravenously (into a vein), by mouth, or applied to the skin in an ointment. Drugs taken by mouth or injected into a vein are called **systemic chemotherapy**. They enter the bloodstream to reach throughout the body, making this treatment useful for vaginal cancer that has spread to other parts of the body.

## Chemo drugs commonly used for vaginal cancer

Because vaginal cancer is rare, there haven't been many studies to see which chemo drug is best. So, at this time, there's no standard or "best" chemo treatment plan. Treatment choices are made based on each person's needs. Most often, doctors use the same types of drugs that are used for cervical cancer. Drugs that have been used include:

- Cisplatin
- Carboplatin
- Bevacizumab (Avastin)
  Paclitaxel (Taxol

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 pregnant. Getting pregnant while receiving chemo is not safe, as it could lead to birth defects and interfere with treatment. This is why it's important to discuss your options for birth control with your doctor if you are pre-menopausal before treatment and are sexually active. Patients who have finished treatment (like chemo) can often go on to have children, but it's important to talk to your doctor about when it is safe to do so.

Premature menopause (not having any more menstrual periods) and infertility (not being able to become pregnant) may occur and may be permanent. Some chemo drugs are more likely to cause this than others. The older you are when you get chemo, the

more likely it is that you will become infertile or go through menopause as a result. If this happens, there is an increased risk of bone loss and osteoporosis. Medicines that can treat or help prevent bone loss are available.

**Neuropathy**: Some drugs used to treat vaginal cancer, including paclitaxel and cisplatin, can damage nerves outside of the brain and spinal cord. The injury can sometimes lead to symptoms like numbness, pain, burning or tingling sensations, sensitivity to cold or heat, or weakness, mainly in the hands and feet. This is called **peripheral neuropathy**. In most cases it gets better or even goes away once treatment stops, but it might last a long time in some people.

**Nephrotoxicity**: Cisplatin, the main chemo drug used to treat vaginal cancer, can damage the kidneys (called **nephrotoxicity**). Many times the damage is preventable and reversible, but sometimes the damage may be long-lasting. Often, there are no symptoms, but the damage can be seen on bloodwork done routinely while chemo is given. If the kidneys show damage, the cisplatin is usually stopped and carboplatin may be used instead.

Other side effects are also possible. Ask your cancer care team about the chemo drugs you will receive and what side effects you can expect.

#### More information about chemotherapy

For more general information about how chemotherapy is used to treat cancer, see <u>Chemotherapy</u><sup>1</sup>.

To learn about some of the side effects listed here and how to manage them, see <u>Managing Cancer-related Side Effects</u><sup>2</sup>.

# Hyperlinks

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

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# Targeted Drug Therapy for Vaginal Cancer

antibody to the chemo drug, deruxtecan. T-DXd can be used by itself to treat late-stage vaginal cancer that is HER2 positive and has recurred after initial systemic treatment.

This drug is given in a vein (IV) typically once every 3 weeks.

Common side effects include low blood cell counts, nausea/vomiting, diarrhea, fatigue, hair loss, decreased appetite, low potassium level, changes in liver function tests, and cough.

A less common but serious side effect include a decreased heart muscle strength, a condition called **left ventricular dysfunction**.

**Tisotumab vedotin-tftv (Tivdak)**: This ADC has an antibody that targets tissue-factor (TF) protein on cancer cells. It brings the chemo drug, monomethyl auristatin E (MMAE), directly to the cancer cell. This drug was studied in people with cervical cancer. Since vaginal cancer is relatively uncommon and lacks data, chemo drugs approved for cervical cancer are commonly used to treat vaginal cancer as well. Tisotumab vedotin can be used by itself to treat late-stage vaginal cancer that has recurred, after initial chemo treatment.

This drug is given in a vein (IV) typically once every 3 weeks.

Common side effects can include feeling tired, nausea, vomiting, hair loss, bleeding, diarrhea, rash, nerve damage (peripheral neuropathy), abnormal kidney function, or low blood cell counts.

Less common but serious side effects can include vision change or loss. People should have regular eye exams while taking this drug and tell their healthcare team right away if they have any eye symptoms.

## **RET** inhibitors

In a small percentage of vaginal cancers, the tumor cells have a rearrangement in the *RET* gene that causes them to make an abnormal form of the RET protein. This abnormal protein helps the tumor cells grow.

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- 1. <u>www.cancer.org/cancer/types/cervical-cancer/treating/immunotherapy.html</u>
- 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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National Comprehensive Cancer Network, Clinical Practice Guidelines in Oncology

# **Immunotherapy for Vaginal Cancer**

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 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
- Fever
- Cough
- Nausea
- Itching
- Skin rash
- Loss of appetite
- Muscle or joint pain
- Shortness of breath
- Constipation or diarrhea

Other, more serious side effects occur less often. These can include:

**Infusion reactions:** Some people might have an infusion reaction while getting these drugs. This is like an allergic reaction, and can include fever, chills, flushing of the face, rash, itchy skin, feeling dizzy, wheezing, and trouble breathing. It's important to tell your doctor or nurse right away if you have any of these symptoms while getting this drug.

**Autoimmune reactions:** These drugs work by removing one of the safeguards on the body's immune system. Sometimes this allows the immune system to attack other parts of the body, which can cause serious or even life-threatening problems in the lungs, 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><sup>3</sup>.

To learn about some of the side effects listed here and how to manage them, see <u>Managing Cancer-related Side Effects</u><sup>4</sup>.

# **Hyperlinks**

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

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# 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" treatments that experts agree on. Most experts agree that treatment in a clinical trial should be considered for any type or stage of vaginal cancer. This way women can get the best treatments available now and may also get the treatments that are thought to be even better.

- Vaginal intraepithelial neoplasia (VAIN)
- Stage 0 (also called VAIN 3 or carcinoma in situ [CIS])
- Stage I
- Stage II through Stage IVA
- Stage IVB
- Recurrent squamous cell cancer or adenocarcinoma of the vagina

# Vaginal intraepithelial neoplasia (VAIN)

<u>VAIN</u><sup>1</sup> is a pre-cancerous change in cells of the vagina. Many cases of low-grade VAIN (VAIN 1) will go away on their own, so some doctors will choose to watch them closely without starting treatment. This means you will be getting Pap tests, often with <u>colposcopy</u><sup>2</sup>, every few months. If the area of VAIN doesn't go away or gets worse, treatment will be started.

VAIN 2 is less likely to go away on its own, so treatment may be started right away. Still, some doctors may just watch it closely and then start treatment later, if needed.

VAIN is often treated using topical therapy (like 5-FU or imiquimod) or laser treatment. When there are many areas of VAIN, intracavitary radiation (brachytherapy) may be used. Sometimes, surgery is used to remove the lesion (the area of abnormal cells). Surgery might also be used if other treatments don't work or if the doctor wants to be sure that the area isn't invasive cancer. Surgery may involve a wide local excision, removing the abnormal area and a rim or edge of surrounding normal tissue. A partial vaginectomy (removing part of the vagina) is rarely needed to treat VAIN.

# Stage 0 (also called VAIN 3 or carcinoma in situ [CIS])

The usual treatment options are laser vaporization, local excision, or intracavitary radiation (brachytherapy).

Topical therapy with 5-FU cream or imiquimod is also an option, but this often means treatment at least weekly for about 10 weeks.

If the cancer comes back after these treatments, surgery (partial vaginectomy) might be needed.

# Stage I

**Squamous cell cancers:** Radiation therapy is used for most stage I vaginal cancers. If the cancer is less than 5 mm thick (about 3/16 inch) and the diameter of the cancer is less than 2 cm, intracavitary radiation may be used alone. Interstitial radiation is an option for some tumors, but it's not often used. For tumors that have grown more deeply or larger in diameter, intracavitary radiation may be combined with external beam radiation.

Removing part or all of the vagina (partial or radical vaginectomy) might be needed depending on the size of the cancer and where it is in the vagina. Reconstructive surgery to create a new vagina after treatment of the cancer is an option if a large part of the vagina has been removed.

If the cancer is in the upper part of the vagina, it may be treated with surgery, such as radical hysterectomy, bilateral radical pelvic <u>lymph node</u><sup>3</sup> removal, and/or radical or partial vaginectomy.

After radical partial or complete vaginectomy, radiation (external beam) may be used if not all of the cancer cells were removed or if cancer cells were found in the lymph nodes of the groin and/or pelvis.

Adenocarcinomas: For cancers in the upper part of the vagina, the treatment issurgery to -- a dical hy

# Stage II through Stage IVA

The usual treatment is external beam radiation given with chemo, and with or without brachytherapy.

Some people may be too frail or have other medical conditions which would not let them tolerate chemo. In those cases, they may be treated with external beam radiation (without concurrent chemo) followed by brachytherapy.

## Stage IVB

Since the cancer has spread (metastasized) to distant sites, it can't be cured. Because vaginal cancer is relatively uncommon, much of the treatment methods for vaginal cancer are based on studies from patients with cervical cancer.

If the tumor cells are found to have certain mutations or biomarkers, a patient with metastatic vaginal cancer may be treated with chemo with immunotherapy, chemo alone, immunotherapy alone, or targeted therapy.

Radiation therapy to the vagina and pelvis might be used to ease symptoms and reduce bleeding.

Because there's no standard treatment for this stage, the best option is to enroll in a <u>clinical trial</u><sup>4</sup>.

#### Recurrent squamous cell cancer or adenocarcinoma of the vagina

If a cancer comes back after treatment it's called <u>recurrent cancer</u><sup>5</sup>. If it comes back in the same place it was the first time, it's called a **local** recurrence. 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 exent5.6 F2 12 Tf 0 0g /iiwibwith radical

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-</u> diagnosed.html
- 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. www.cancer.org/cancer/managing-cancer/palliative-care.html
- 7. <u>www.cancer.org/cancer/managing-cancer/making-treatment-decisions/clinical-</u> trials.html

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