Treating Vaginal Cancer

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.

- Laser Surgery for Vaginal Pre-Cancer
- Topical Therapy for Vaginal Pre-Cancer

Treatments for invasive vaginal cancer

Invasive vaginal cancer is treated mainly with radiation therapy and surgery. Chemotherapy given along with radiation might be used to treat advanced disease.

- Radiation Therapy for Vaginal Cancer
- Surgery for Vaginal Cancer
- Chemotherapy for Vaginal Cancer

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 Associated With Cancer Care[1]

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[2]
- Fertility and Sexual Side Effects[3]
- Seeking a Second Opinion[4]

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[5]

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 Alternative Medicine[6]

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[7]
- Find Support Programs and Services in Your Area[8]

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[9]

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 him or her questions about your treatment options.

Laser Surgery for Vaginal Pre-Cancer

In laser surgery, a beam of high-energy light is used to vaporize the abnormal tissue. This treatment works well for vaginal pre-cancer (vaginal intraepithelial neoplasia or VAIN), and can even be used for large lesions (areas of abnormal cells). It can be repeated, if needed, and rarely causes problems or side effects.

Still, **this is not a treatment for invasive cancer**. For laser surgery to be an option, the doctor must be certain that the worst lesion was tested[1] and it's not invasive cancer.

For more information on laser surgery, see Lasers in Cancer Treatment[2].

Hyperlinks

1. www.cancer.org/cancer/vaginal-cancer/detection-diagnosis-staging/how-diagnosed.html
2. www.cancer.org/treatment/treatments-and-side-effects/treatment-types/lasers-in-cancer-treatment.html

References

National Cancer Institute. Vaginal Cancer Treatment (PDQ®)–Patient Version. October 13, 2017. Accessed at www.cancer.gov/types/vaginal/patient/vaginal-treatment-pdq on March 12, 2018.

Piovano E, Macchi C, Attamante L, et al. CO2 laser vaporization for the treatment of vaginal intraepithelial neoplasia: effectiveness and predictive factors for recurrence. *Eur J Gynaecol Oncol*. 2015;36(4):383-388.

Sopracordevole F, Moriconi L, Di Giuseppe J, et al. Laser Excisional Treatment for Vaginal Intraepithelial Neoplasia to Exclude Invasion: What Is the Risk of Complications? *J Low Genit Tract Dis*. 2017;21(4):311-314.

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Topical Therapy for Vaginal Pre-Cancer

Topical therapy puts the drug right onto the affected area. This may be done to treat vaginal pre-cancer (vaginal intraepithelial neoplasia or VAIN), but it's not used to treat invasive vaginal cancer.

Two drugs are used most often for topical therapy:

- Fluorouracil (5-FU) is a chemotherapy drug that can be applied directly to the lining of the vagina. This is repeated weekly for about 10 weeks or given nightly for 1 to 2 weeks. However, this treatment can cause severe vaginal and vulvar irritation. Also, it may not work as well as using a laser or simply removing the area of abnormal cells with surgery.
- Imiquimod is a cream that can be applied to the area of VAIN. Imiquimod is not a chemotherapy drug. Instead, it acts by boosting the body's immune response to the area of abnormal tissue. It may be used once a week for 3 to 8 weeks. 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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Gurumurthy M, Cruickshank ME. Management of vaginal intraepithelial neoplasia. *J Low Genit Tract Dis*. 2012;16(3):306-312.

Kim MK, Lee IH, Lee KH. Clinical outcomes and risk of recurrence among patients with vaginal intraepithelial neoplasia: a comprehensive analysis of 576 cases. *J Gynecol Oncol*. 2018;29(1): e6.

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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 given?

There are 2 ways to treat vaginal cancer with radiation - external beam radiation therapy, and intracavity brachytherapy (also called internal radiation therapy). **Vaginal cancer is most often treated with a combination of both external and internal radiation** with or without low doses of chemotherapy.

External beam radiation therapy

With this type of treatment, radiation is delivered from outside the body in a procedure that's a lot like getting an x-ray. It 's sometimes used along with chemotherapy to treat more advanced cancers. It can shrink tumors so they can be easier to remove with surgery. Radiation alone might be used to treat lymph nodes[1] in the groin and pelvis.

Intracavitary brachytherapy

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

- **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 is used helps hold the cylinder in place, but you have to stay in bed in the hospital during the treatment.
- **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 in contact with 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.

Long-term side effects

Radiation to treat vaginal cancer can also cause some long-term side effects. Many of them are caused by radiation damage to nearby organs. For instance, pelvic radiation can damage the ovaries, leading to early menopause. It can also weaken bones, making them more likely to break from a fall or other trauma.

Radiation to the pelvis can also severely irritate the intestines and rectum (called *radiation colitis*), leading to diarrhea and bloody stool. If severe, radiation colitis can cause holes or tears to form in the intestines (called *perforations*).

Pelvic radiation can cause problems with the bladder (*radiation cystitis*), leading to discomfort and an urge to urinate often. In rare cases, radiation can cause abnormal connections (called *fistulas*) to form between the vagina and the bladder, rectum, or uterus.

If the skin was irritated by radiation, when it heals it may be darker and not as soft. The hair may not grow back.

Radiation can cause the normal tissue of the vagina to become irritated and sore. As it heals, scar tissue can form in the vagina. The scar tissue can make the vagina shorter or more narrow (this is called *vaginal stenosis*). When this happens, vaginal intercourse (sex) can become painful. Stretching the walls of the vagina a few times a week can

help prevent this problem.

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 estrogens 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 Sex and the Woman With Cancer[2] to learn more.

More information about radiation therapy

To learn more about how radiation is used to treat cancer, see Radiation Therapy[3].

To learn about some of the side effects listed here and how to manage them, see Managing Cancer-related Side Effects[4].

Hyperlinks

1. www.cancer.org/cancer/cancer-basics/lymph-nodes-and-cancer.html
2. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/fertility-and-sexual-side-effects/sexuality-for-women-with-cancer.html
3. www.cancer.org/treatment/treatments-and-side-effects/treatment-types/radiation.html
4. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects.html

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Orton A, Boothe D, Williams N, et al. Brachytherapy improves survival in primary vaginal cancer. *Gynecol Oncol*. 2016;141(3):501-506.

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Surgery for Vaginal Cancer

Surgery is usually only used for small stage I or II vaginal cancers and for cancers that were not cured with radiation. The extent of the surgery depends on the size, location, and stage[1] of the cancer.

Types of surgery used for vaginal cancer

Local excision

This is sometimes called a *wide excision*. The surgeon takes out the cancer along with a nearby edge or rim of normal tissue. For VAIN[2], a local excision may be all that's needed. For small stage I cancers, treatment may include a local excision along with surgery to check the lymph nodes[3] (see below).

Vaginectomy

Vaginectomy is surgery to remove the vagina. If only part of the vagina is removed, it's called a *partial vaginectomy*. If the entire vagina is removed, it's called a *total vaginectomy*. A *radical vaginectomy* is removal of the vagina along with the supporting tissues around it.

Trachelectomy

Vaginal cancer most often starts in the upper part of the vagina (near the cervix), so removing the cancer sometimes means also removing the cervix. If only the cervix is removed (leaving the rest of uterus behind), the operation is called a *trachelectomy*. (See Surgery for Cervical Cancer[4] for more about this procedure.) This is rarely done to treat 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 *bilateral salpingo-oophorectomy* (or BSO). You may see the abbreviation TAHBSO, which stands for *total abdominal hysterectomy 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 *total abdominal hysterectomy*; TAH).

For 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 that's put into one of the cuts – is used 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 allows surgeon to do the hysterectomy without making a large cut in the abdomen.
- **Robot-assisted surgery:** Many surgeries are also done using a robotic interface. For this, the surgeon sits at a panel near the operating table and controls tools on robotic arms to perform the operation 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's possible to reconstruct (rebuild) a

vagina with tissue from another part of the body. This allows a woman 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 Sex and the Woman With Cancer[5] to learn more.

Surgery to remove lymph nodes (lymphadenectomy)

Surgery to remove lymph nodes[6] is called *lymphadenectomy* or *lymph node dissection*. For vaginal cancer, lymph nodes in the groin area or inside the pelvis near the vagina may be taken out to check for cancer spread.

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 that doesn't get better at night when you're lying down. This is called *lymphedema*. This is more common 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. Women 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 Lymphedema[7].

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 the woman places a catheter 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 Urostomy Guide[8].

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 Colostomy Guide[9]. 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 a woman has been treated with radiation for cervical cancer in the past. This 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 Cancer Surgery[10].

To learn about some of the side effects listed here and how to manage them, see Managing Cancer-related Side Effects[11].

Hyperlinks

1. www.cancer.org/cancer/vaginal-cancer/detection-diagnosis-staging/staging.html
2. www.cancer.org/cancer/vaginal-cancer/about/what-is-vaginal-cancer.html
3. www.cancer.org/cancer/cancer-basics/lymph-nodes-and-cancer.html
4. www.cancer.org/cancer/cervical-cancer/treating/surgery.html
5. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/fertility-and-sexual-side-effects/sexuality-for-women-with-cancer.html
6. www.cancer.org/cancer/cancer-basics/lymph-nodes-and-cancer.html
7. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/lymphedema.html
8. www.cancer.org/treatment/treatments-and-side-effects/treatment-types/surgery/ostomies/urostomy.html
9. www.cancer.org/treatment/treatments-and-side-effects/treatment-types/surgery/ostomies/colostomy.html
10. www.cancer.org/treatment/treatments-and-side-effects/treatment-types/surgery.html
11. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects.html

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Jain V, Sekhon R, Giri S, et al. Role of Radical Surgery in Early Stages of Vaginal Cancer-Our Experience. *Int J Gynecol Cancer*. 2016;26(6):1176-1181.

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See all references for Vaginal Cancer (www.cancer.org/cancer/vaginal-cancer/references.html)

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Chemotherapy for Vaginal Cancer

How is chemo used to treat vaginal cancer?

Chemotherapy[1] (chemo) uses anti-cancer drugs that 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[2] that has spread to other parts of the body.

Chemo is most often used along with radiation therapy to treat vaginal cancer.

Chemo is the main treatment for vaginal cancer that has spread. It can also help shrink tumors before surgery. When it's used before surgery, it may be given along with radiation to make the radiation work better.

Chemo drugs commonly used

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 woman'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
- Fluorouracil (5-FU)
- Paclitaxel (Taxol®)
- Docetaxel (Taxotere®)
- Irinotecan

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 women with vaginal cancer, 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. Ask your cancer care team about the chemo drugs you will receive and what side effects you can expect. Also be sure to talk with them about any side effects you do have so that they can be treated. For example, you can be given medicine to reduce or prevent nausea and vomiting.

More information about chemotherapy

For more general information about how chemotherapy is used to treat cancer, see Chemotherapy[3].

To learn about some of the side effects listed here and how to manage them, see Managing Cancer-related Side Effects[4].

Hyperlinks

1. www.cancer.org/treatment/treatments-and-side-effects/treatment-types/chemotherapy.html
2. www.cancer.org/cancer/vaginal-cancer/about/what-is-vaginal-cancer.html
3. www.cancer.org/treatment/treatments-and-side-effects/treatment-types/chemotherapy.html
4. www.cancer.org/treatment/treatments-and-side-effects/physical-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[1] you have, how far the cancer has spread, your overall health, and your preferences.

Because vaginal cancer is rare, it's has been hard to study it well. There are no "standard" treatments that experts agree on. Most experts agree that treatment in a clinical trial[2] 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)

VAIN[3] in 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 getting Pap tests, often with colposcopy[4], every few months. If the area of VAIN doesn't go away or gets worse, treatment is 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), 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, 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 vagina, it may be treated with surgery, such as radical hysterectomy, bilateral radical pelvic lymph node[5] removal, and/or radical or partial vaginectomy.

After radical partial or complete vaginectomy, radiation (external beam) may be used to treat cancer cells that might have spread to lymph nodes in the groin and/or pelvis.

Adenocarcinomas: For cancers in the upper part of the vagina, the treatment is surgery -- a radical hysterectomy, partial or radical vaginectomy, and removal of pelvic lymph nodes. This can be followed by reconstructive surgery if needed or desired. Both internal and external radiation therapy may be given as well.

For cancers lower down in the vagina, external beam radiation therapy may be used, along with either interstitial or intracavitary radiation therapy. The lymph nodes in the groin and/or pelvis are often treated with external beam radiation therapy.

Stage II

The usual treatment is radiation, using both brachytherapy and external beam radiation.

Radical surgery (radical vaginectomy or pelvic exenteration) is an option for some women with stage II vaginal squamous cell cancer if it's small and in the upper vagina. Radiation might be given after surgery. Surgery is also used to treat women who already had radiation therapy for cervical cancer and would have severe damage to normal tissues if more radiation was given.

If the tumor is in the lower third of the vagina, external radiation may be used to treat lymph nodes[6] in the groin or pelvis.

Chemotherapy (chemo) with radiation may also be used to treat stage II disease.

Giving chemo to shrink the cancer before radical surgery may be helpful.

Stage III or IVA

The usual treatment is radiation therapy, often with both brachytherapy and external beam radiation. Chemo might be combined with radiation to help it work better. Surgery is rarely used.

Stage IVB

Since the cancer has spread to distant sites, it can't be cured. Radiation therapy to the vagina and pelvis might be used to ease symptoms and reduce bleeding. Chemo might also be given with the radiation. Chemo alone has not been shown to help women live longer. Because there's no standard treatment for this stage, the best option is to enroll in a clinical trial[7].

Recurrent squamous cell cancer or adenocarcinoma of the vagina

If a cancer comes back after treatment it's called recurrent cancer[8]. 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 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 relieving symptoms[9], although taking part in a clinical trial[10] of new treatments may be helpful.

For a distant recurrence, the goal of treatment is to help the woman feel better. Surgery, radiation, or chemo may be used. Again, a clinical trial is a good option.

Hyperlinks

1. www.cancer.org/cancer/vaginal-cancer/about/what-is-vaginal-cancer.html
2. www.cancer.org/treatment/treatments-and-side-effects/clinical-trials.html
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