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Anal Cancer Early Detection, Diagnosis, and Staging

Know the signs and symptoms of anal cancer. Find out how anal cancer is tested for, diagnosed, and staged.

Detection and Diagnosis

Finding cancer early often allows for more treatment options. Some early cancers may cause signs and symptoms that can be noticed, but that's not always the case.

- [Can Anal Cancer Be Found Early?](#)
- [Signs and Symptoms of Anal Cancer](#)
- [Tests for Anal Cancer](#)

Staging

After a cancer diagnosis, staging provides important information about the extent of cancer in the body and anticipated response to treatment.

- [Anal Cancer Stages](#)
- [Anal Cancer Survival Rates](#)

Questions to Ask About Anal Cancer

Here are some questions you can ask your cancer care team to help you better understand your cancer diagnosis and treatment options.

- [Questions to Ask About Anal Cancer](#)

Can Anal Cancer Be Found Early?

- [Screening people at high risk](#)

Many anal cancers can be found early. Early anal cancers often have [signs and symptoms](#) that lead people to see a doctor. Unfortunately, some anal cancers may not cause symptoms until they reach an advanced stage. Other anal cancers can cause symptoms like those of diseases other than cancer. This may delay their diagnosis.

Anal cancers develop in a part of the digestive tract that your doctor can easily see and get to. A **digital rectal exam (DRE)** can find some cases of anal cancer early. In this exam, the doctor inserts a gloved, lubricated finger into the anus to feel for unusual lumps or growths. This test is sometimes used to look for prostate cancer in men (because the prostate gland can be felt through the rectum). The rectal exam is also done routinely as part of a pelvic exam on women.

The odds that anal cancer can be found early depend on the location and type of the cancer. Cancers that begin higher up in the anal canal are less likely to cause symptoms and be found early. Anal melanomas tend to spread earlier than other cancers, making them harder to diagnose them early.

Screening people at high risk

Looking for a disease like cancer in someone with no symptoms is called **screening**. The goal of screening is to find cancer at an early stage, when treatment is likely to be most helpful. Anal cancer is not common in the United States, so screening the general public for anal cancer is not widely recommended at this time.

that come off on the swab are looked at closely in the lab. The anal Pap test can then be followed by a DRE or a procedure called an [anoscopy](#).

The anal Pap test has not been studied enough to know how often it should be done, or if it actually reduces the risk of anal cancer by catching AIN early. Some experts recommend that the test be done every year in at-risk people who are HIV-positive, and every 2 to 3 years in at-risk people who are HIV-negative. But there is no widespread agreement on the best screening schedule, or even exactly which groups of people can benefit from screening.

Patients with positive results on an anal Pap test should be referred for a biopsy. If AIN is found on the biopsy, it might need to be treated (especially if it is high-grade).

Hyperlinks

1. www.cancer.org/cancer/types/anal-cancer/about/what-is-anal-cancer.html
2. www.cancer.org/cancer/types/cervical-cancer.html
3. www.cancer.org/cancer/types/vaginal-cancer.html
4. www.cancer.org/cancer/types/vulvar-cancer.html

References

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Palefsky JM and Cranston RD. Anal squamous intraepithelial lesions: Diagnosis, screening, prevention, and treatment. Aboulafia DM, ed. UpToDate. Waltham, MA: UpToDate Inc. <https://www.uptodate.com/consultant?search=anal+squamous+intraepithelial+lesions>, MA:

Signs and Symptoms of Anal Cancer

Tests for Anal Cancer

Biopsy

- To look for signs of cancer coming back after treatment

Ultrasound

[Ultrasound](#)⁷ uses sound waves to make pictures of internal organs or masses. This test can be used to see how deep the cancer has grown into the tissues near the anus.

For most ultrasound exams a wand-like transducer is moved around on the skin. But for anal cancer, the transducer is put into the rectum. This is called a *transrectal* or *endorectal ultrasound*. The test can be uncomfortable, but it usually doesn't hurt.

Computed tomography (CT) scan

[CT scans](#)⁸ use x-rays to make detailed cross-sectional images of your body. This is a common test for people with anal cancer. This test can help tell if the cancer has spread into the lymph nodes or to other parts of the body, such as the liver, lungs, or other organs.

CT) scan CT-guided needle biopsy: A CT scan can also be used to guide a biopsy needle right into an area that could be cancer.

Magnetic resonance imaging (MRI)

[MRI scans](#)⁹ use radio waves and strong magnets instead of x-rays. A contrast material called *gadolinium* may be injected into a vein before the scan to see details better.

This test is sometimes used to see if nearby lymph nodes are enlarged, which might be a sign the cancer has spread there. MRI can also be used to look at abnormal areas in the rectum. MRI can also help see if the cancer has spread to other parts of the body.

PET scan.

PET/CT scan: A CT scan can show more details than a PET scan, so a PET scan is often combined with a CT scan using a special machine that can do both at the same time. This lets the doctor compare areas of higher radioactivity on the PET scan with the more detailed image of that area on the CT scan.

PET/CT scans can be useful:

- If your doctor thinks the cancer might have spread but doesn't know where. They can show spread of cancer to the liver, bones, lymph nodes in the pelvis, or other organs. They are not as useful for looking at the brain or spinal cord.
- In staging anal cancer when you are first diagnosed. But their role in checking whether treatment is working or after completion of treatment is unproven. Most doctors do not recommend PET/CT scans for routine follow up after anal cancer treatment, and most often will order CT or MRI scans to watch for cancer recurrence.

[scans-for-cancer.html](#)

Anal Cancer Stages

The stages of anal cancer range from stage I (1) through IV (4). As a rule, the lower the number, the less the cancer has spread. A higher number, such as stage IV, means cancer has spread more. And within a stage, an earlier letter means a lower stage. Although each person's cancer experience is unique, cancers with similar stages tend to have a similar outlook and are often treated in much the same way.

How is the stage determined?

The staging system most often used for anal cancer is the American Joint Committee on Cancer (AJCC) **TNM** system, which is based on 3 key pieces of information:

- The extent of the main (primary) **tumor (T)**: What is the size of the tumor? Has it grown into nearby structures or organs?
- The spread to nearby **lymph nodes (N)**: Has the cancer spread to nearby lymph nodes?
- The spread (**metastasis**) to distant sites (**M**): Has the cancer spread to distant lymph nodes or distant organs such as the liver or lungs?

Numbers or letters after T, N, and M provide more details about each of these factors. Higher numbers mean the cancer is more advanced. Once a person's T, N, and M categories have been determined, this information is combined in a process called *stage grouping* to assign an overall stage. For more information see [Cancer Staging²](#).

Anal cancer is usually staged based on the [results of a physical exam, biopsy, and imaging tests](#). This is called a *clinical stage*. If surgery is done, the *pathologic stage* (also called the *surgical stage*) is determined by examining tissue removed during an operation.

The system described below is the most recent AJCC staging system for anal cancer, effective as of January 2023. It is used for tumors in the anal canal and perianal area (also called the anal margin).

Cancer staging can be complex, so ask your doctor to explain it to you in a way you understand.

AJCC Stage	Stage grouping	Stage description*
I	T1 N0	The cancer is no more than 2 cm (about 4/5 inch) across (T1). It has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).



people in the overall population. For example, if the **5-year relative survival rate** for a specific stage of anal cancer is 80%, it means that people who have that cancer are, on average, about 80% as likely as people who don't have that cancer to live for at least 5 years after being diagnosed.

Where do these numbers come from?

The American Cancer Society relies on information from the Surveillance, Epidemiology, and End Results (SEER) database, maintained by the National Cancer Institute (NCI), to provide survival statistics for different types of cancer.

The SEER database tracks 5-year relative survival rates for anal cancer in the United States, based on how far the cancer has spread. The SEER database, however, does not group cancers by [AJCC TNM stages](#) (stage 1, stage 2, stage 3, etc.). Instead, it groups cancers into localized, regional, and distant stages:

Localized:

- **These numbers apply only to the stage of the cancer when it is first diagnosed.** They do not apply later on if the cancer grows, spreads, or comes back after treatment.
- **These numbers don't take everything into account.** Survival rates are grouped based on how far the cancer has spread. But other factors, such as your age and overall health, the [type of anal cancer](#)¹ you have, and how well the cancer responds to treatment, can also affect your outlook.
- **People now being diagnosed with anal cancer may have a better outlook than these numbers show.** Treatments improve over time, and these numbers are based on people who were diagnosed and treated at least five years earlier.

Hyperlinks

1. www.cancer.org/cancer/types/anal-cancer/about/what-is-anal-cancer.html

References

SEER*Explorer: An interactive website for SEER cancer statistics [Internet]. Surveillance Research Program, National Cancer Institute. Accessed at <https://seer.cancer.gov/explorer/> on February 23, 2023.

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Questions to Ask About Anal Cancer

- [When you're told you have anal cancer](#)
- [When deciding on a treatment plan](#)
- [During treatment](#)
- [After treatment](#)

It's important to have honest, open discussions with your cancer care team. They want

to answer all your questions, so that you can make informed treatment and life decisions. For instance, consider these questions:

When you're told you have anal cancer

- What [kind](#)¹ of anal cancer do I have?
- Has my cancer spread beyond where it started?
- What is the [stage](#) of my cancer and what does this mean in my case?
- Will I need other [tests](#)² before we can decide on treatment?
- Will I need to see other doctors?
- If I'm concerned about the costs and insurance coverage for my diagnosis and treatment, who can help me?

When deciding on a treatment plan

- How much experience do you have treating this type of cancer?
- Should I get a [second opinion](#)³? How do I do that? Can you recommend someone or a cancer center?
- What are my [treatment](#)⁴ choices?
- What treatment would you recommend for me? Why?
- What is the goal of each treatment?
- What are the chances my cancer can be cured with these options?
- How quickly do I need to decide on treatment?
- What should I do to be ready for treatment?
- How long will treatment last? What will it be like? Where will it be done?
- What are the risks or side effects of the treatments you suggest? How long are they likely to last?
- Will I need to have a colostomy?
- How soon do I need to start treatment?
- Will treatment affect my daily activities?
- What would my options be if the treatment doesn't work or if the [cancer comes back](#)⁵ after treatment?

During treatment

- How will we know if the treatment is working?
- Is there anything I can do to help manage [side effects](#)⁶?
- What symptoms or side effects should I tell you about right away?
- How can I reach you on nights, holidays, or weekends?
- Do I need to change what I eat during treatment?
- Are there any limits on what I can do?
- Can you suggest a mental health professional I can see if I start to feel overwhelmed, [depressed](#)⁷, or [distressed](#)⁸?

