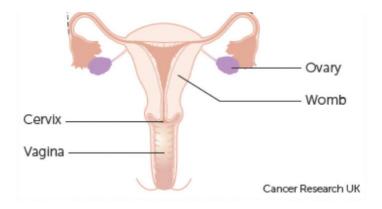




## The Facts

Vaginal cancer is a rare cancer of the female reproductive system. Around 15 women are diagnosed with it every year in Ireland.

The vagina is part of the female reproductive system. It is a muscular tube about 10cm long. It is the passage between the opening of the womb (cervix) and the vulva.



The vagina is the opening that allows blood to drain out each month during your menstrual period. The walls of the vagina are normally in a relaxed state. The vagina opens and expands during sexual intercourse and it stretches during childbirth to allow the baby to come out.

### **Symptoms**

It's rare to have symptoms if you have pre-cancerous cell changes in the lining of the vagina, called vaginal intraepithelial neoplasia (VAIN).

As many as 20 in 100 women (20%) diagnosed with vaginal cancer don't have symptoms at all. Your doctor may pick up signs of VAIN or very early vaginal cancer during routine cervical screening.

However, around 80 out of 100 women (80%) with vaginal cancer have one or more symptoms. These can include:

- bleeding in between periods or after the menopause
- bleeding after sex
- vaginal discharge that smells or is blood stained
- pain during sexual intercourse
- a lump or growth in the vagina that you or your doctor can feel
- a vaginal itch that won't go away

Remember that many of these symptoms can also be caused by other conditions, such as infection.





## **Risk Factors**

Although the exact cause of vaginal cancer isn't known, certain factors appear to increase your risk of the disease, including:

- Increasing age: The risk of vaginal cancer increases with age, though it can occur at any age. The average age at diagnosis is 65.
- Being exposed to human papillomavirus (HPV): HPV infection increases the risk of several cancers, including vulval, vaginal and cervical cancer. Many young, sexually active people are exposed to HPV, but for most the infection goes away on its own. For some, the infection causes cell changes and increases the risk of cancer in the future.
- **Smoking:** Smoking cigarettes increases the risk of vaginal cancer.
- Having a weakened immune system. People who take medications to suppress the immune system, such as those who've undergone organ transplant, and those with conditions that weaken the immune system, such as human immunodeficiency virus (HIV), have an increased risk of vaginal cancer.
- Having a history of precancerous conditions of the vagina. Vaginal intraepithelial neoplasia (VaIN) is a precancerous condition that increases the risk of vaginal cancer. Most cases of VaIN will never develop into cancer, but a small number do go on to become invasive vaginal cancer. For this reason, your doctor may recommend treatment to remove the area of abnormal cells and have follow-up checks. Having previous precancerous changes to the cervix also increases your risk of developing VaIN.
- Having been exposed to Diethylstilbestrol (DES). This was a drug that doctors used to give to
  pregnant women to stop them having a miscarriage. DES was only used between 1945 and
  1970 and researchers are still gathering information about its effects. Daughters of women
  who took DES during their pregnancy (particularly during the first trimester) are more at risk of
  getting a type of vaginal cancer called clear cell adenocarcinoma. DES hasn't been used for
  over 40 years now, so it's becoming less common as a risk factor.





## **Diagnosis**

Your history of symptoms will be taken by your GP or Gynaecologist and an examination of the vagina is required often using a speculum. In order to diagnosis vaginal cancer a small biopsy is required. This confirms whether cancer is present and also what type of vaginal cancer it is.

This is often able to be performed under local anaesthetic as will be small but sometimes it may be easier to perform this under an anaesthetic especially if a more thorough examination is required.

Scans that assesses if the cancer has spread include **MRI and CT** of the chest, abdomen and pelvis and also occasionally a scan called a **PET CT**.

- **CT Scan**: This is often a scan to assess your chest, abdomen and pelvis. It is performed in the X-Ray department and involves passing through a circular or "donut" shaped scanner.
- **MRI Scan**: This is a very useful scan to assess the tumour in the vagina, the tissue directly around it and also the lymph nodes in the pelvis. It involves passing into a tunnel and some people find more difficult but the procedure will be explained and the scan will aim to assess the pelvis only.
- **PET CT**: This scan also looks at the entire body and is used to identify if the cancer has spread.

You case will be referred to the gynaecological oncology service and you will attend an appointment at our clinic. Here you will be reviewed by a gynaecological oncology surgeon and will be introduced to our clinical specialist nurse team.

We often ask permission to examine you again, discuss your results and also what the expected treatment plan will be. Every cancer case is discussed at our MDT (multi-disciplinary meeting) with all the members of our extended team.

Therefore, each decision for treatment is made by an expert group and is personalised for each patient. Often, we may see you at clinic on the morning before this meeting. You will be given a treatment plan at that visit, however in 1 in 10 cases this plan will be changed at the MDT meeting and we may contact you after this to confirm the treatment plan.





### **Types of Vaginal Cancer**

There are different types of vaginal cancer:

### • Squamous Cell Carcinoma

This is the most common type of vaginal cancer and is most likely to develop in the upper third of the vagina, closest to the cervix or where the cervix was if you have already had a hysterectomy.

More than 80% of cases are squamous cell cancer. This originates from the flat skin like cells that cover the surface of the vagina and the tumours often look like small lumps (nodules) or sores (ulcers). Before squamous cell cancer develops, there may be precancerous changes to the cells. These cell changes are called vaginal intraepithelial neoplasia (VAIN).

### • Adenocarcinoma

These are much rarer than squamous cell vaginal cancers and start in the gland cells (adenomatous cells) in the lining of the vagina

Around 1 in 10 vaginal cancers (10%) are adenocarcinomas. This type of cancer can be harder to diagnose than squamous cell cancer and can occur in younger women. The cancer is more likely to be hidden inside the vaginal canal.

There are 4 main types of adenocarcinoma of the vagina: Clear Cell Adenocarcinoma, Papillary Adenocarcinoma, Mucinous Adenocarcinoma and Adenosquamous Carcinoma.

#### • Sarcoma

Sarcomas are cancers that start in the body's connective tissues such as bone, muscle, fat and cartilage. Sarcomas of the vagina are extremely rare and account for only about 3 out of every 100 vaginal cancers (3%). These cancers tend to grow quite quickly. Different types of sarcoma can start in the vagina, including leiomyosarcoma and rhabdomyosarcoma.

#### • Melanoma

Melanoma develops from the cells in the skin that produce pigment, which gives the skin its colour. Only about 3 out of every 100 vaginal cancers (3%) are melanomas. They are most likely to develop in the lower third of the vagina. Vaginal melanomas are more common in women in their 50's.

#### • Small Cell

Small cell cancer is also called oat cell carcinoma because the cancer cells are a distinctive oat shape. Small cell vaginal cancers are extremely rare.

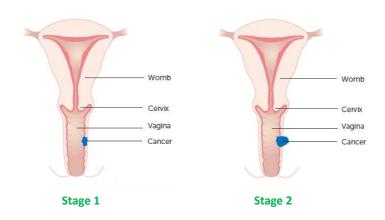


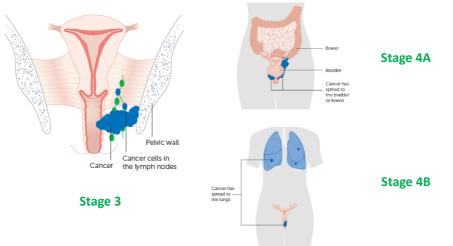


### **Staging of Vaginal Cancer**

For Vaginal Cancer we apply the International Federation of Gynaecology and Obstetrics (FIGO) staging system. There are 4 stages, numbered 1 to 4.

- Stage 1 the cancer is confined to the wall of the vagina
- Stage 2 the cancer has begun to spread outside the vagina into the surrounding tissues. But it has not reached the walls of the pelvis
- Stage 3 the cancer has spread outside the vagina and reached the side walls of the pelvis. There may also be cancer cells in lymph nodes close to the vagina
- Stage 4 the cancer has spread to other parts of the body. This may be to the bladder or bowel nearby (Stage 4A) or to distant organs such as the lungs (Stage 4B)





Adapted from Cancer Research UK





## **Treatment**

The two main treatments for vaginal cancer are radiotherapy and surgery. You may also have chemotherapy alongside radiotherapy.

This page is about the treatment of vaginal cancer. Treatment could be different if you have abnormal cells in the inner lining of the vagina known as vaginal intraepithelial neoplasia (VAIN).

The treatment that is best for you will depend on:

- the type of vaginal cancer you have
- the stage of your cancer
- which part of your vagina is affected by cancer
- any previous treatment you might have already had
- your general health

### Surgery

Surgery aims to remove the cancer and tends to be the treatment for early stage vaginal cancer (Stage 1). This is particularly the case if you have a type called adenocarcinoma or squamous cell cancer at the top of your vagina.

There are different operations that may be performed depending on which is best for your cancer:

- Vaginectomy: Your vagina and nearby tissues are removed.
- **Radical hysterectomy:** Your womb, cervix and upper part of your vagina are removed, as well as the nearby tissues.
- **Pelvic exenteration:** If the cancer has spread beyond your vagina, the surgery may involve removing the affected organs. For example, your cervix or part of your lower bowel or bladder.
- **Vaginal reconstruction:** After a vaginectomy or pelvic exenteration, you may need skin grafts and plastic surgery. This is known as vaginal reconstruction.
- **Lymphadenectomy:** In this surgery, the lymph nodes near your vagina are removed. These are usually from the pelvis or groin.

### Radiotherapy

Radiotherapy uses radiation to kill cancer cells and can be given in two ways:

- External beam radiotherapy: The radiation comes from machines which aim rays directly at your tumour or the tumour site. The machines are called linear accelerators.





Internal radiotherapy (brachytherapy): The radiation source is placed inside your body – usually inside your vagina – in special applicators on or near your tumour.

Often a combination of these two methods are used in vaginal cancer treatment. You might have radiotherapy in one of the following situations:

- as your main treatment
- to treat a cancer if you can't have surgery
- to help stop cancer coming back after surgery
- to treat a cancer that couldn't be completely removed with surgery
- as a combination treatment with chemotherapy (chemoradiation)

#### Chemotherapy

You are unlikely to have chemotherapy on its own as a first treatment for your cancer. This is because surgery or radiotherapy tend to work best. You might have chemotherapy alongside the radiotherapy treatment (chemoradiation).

Chemotherapy on its own may be suggested if your cancer is advanced, or has come back after treatment with radiotherapy or surgery. This may help to relieve symptoms and slow the growth of your cancer.

#### **Research**

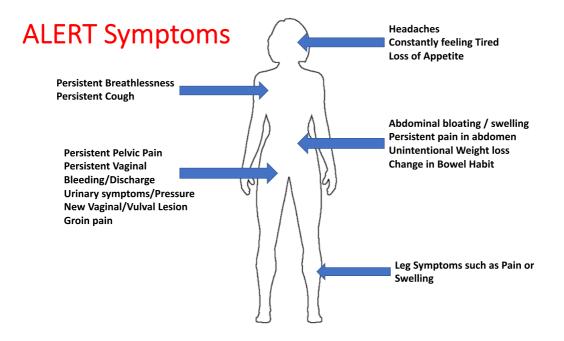
Our team specialises in all types of gynaecological cancer, including vaginal cancer. We are involved in many research projects and clinical trials to ensure every effort is made to provide the best possible care and to try and develop new treatments. We will ask you to partake in our research program and this will be explained in detail along with asking for your consent.

### Living With & After Vaginal Cancer

Survival depends on many different factors. There are general statistics based on large groups of patients, but, they can't tell you what will happen in your individual case. Therefore, being aware of the symptoms of possible recurrence of your cancer (also known as ALERT symptoms) is important along with attending for follow up appointments. These appointments can be a combination of physical and virtual appointments and this will be explained to you.







The treatment of vaginal cancer itself may result in symptoms and longer-term complications. We do everything possible to try and minimise the risk of these complications but also have developed services to identify and treat these as early as possible. Of importance is referral to our lymphoedema service and we do this at diagnosis. We aim to prevent and manage lymphoedema at an early stage where possible. Surgery and radiotherapy for vaginal cancer can also affect aspects of your life including early menopause and your sex life. We aim to support your fully in these areas and can provide information and support during your cancer journey.

Follow up after your treatment is completed is therefore extremely important both for monitoring for any sign the cancer may have returned and also to help support patients with any side effects of treatment.

Throughout your journey with our team we will support you fully in any decision you make. You can get emotional and practical support through our team, local hospice and GP practice. You can also get help and information from charities and support groups.

Further information and support for vulval cancer can be found at:

- Irish Cancer Society <u>www.cancer.ie</u>
- MacMillan Cancer Support <u>www.macmillan.org.uk</u>
- Arc Cancer Support <u>www.arccancersupport.ie</u>
- Cancer Research UK <u>www.cancerresearchuk.org</u>