

**Anal Cancer is a rare disease, affecting around 1300 people a year in the UK (Cancer Research UK). It is slightly more common in women than in men, with a male:female ratio of cases of 1:2. The outlook for anal cancer is often better than for other types of bowel cancer, especially when caught in the earlier stages.**

The anus (back passage) is the 4cm long end portion of the large bowel, which opens to allow solid waste to exit the body. Abnormal changes of the anus are sometimes harmless in their early stages, but may go on to develop into cancer. Different cancers can develop in different parts of the anus. Types of anal cancer include:

#### **Squamous cell carcinomas**

The most common type of anal cancer (about 75% of cases) is squamous cell carcinoma, which starts in the cells lining the anal margin and the anal canal. The *anal margin* is the edge of the anus that can be partly seen as darker skin on the outside of the body and the *anal canal* is the part of the anus that is inside the body. This factsheet mainly discusses treatment for this type of anal cancer. The earliest form of squamous cell carcinoma is known as carcinoma in situ, or Bowen's disease.

#### **Adenocarcinomas**

15% of anal cancers are adenocarcinoma. This affects glands in the anal area and one type of adenocarcinoma that can occur in the anal area, known as Paget's disease, can also affect the vulva, breasts, and other areas of the body. Anal adenocarcinomas are usually treated in the same way as rectal cancer (please see our booklet 'Bowel Cancer Treatment – Your Pathway').

#### **Skin cancers**

A small number of anal cancers are either basal cell carcinomas, or malignant melanomas - two different types of skin cancer.

#### **Other types of anal cancer**

Other, very rare types of anal cancer are lymphomas, and gastrointestinal stromal tumours (GIST).

## **Causes and risk factors**

The cause of anal cancer is still unknown, but there are several factors which may increase your risk of developing the disease. The most common is the link to two specific 'oncogenic' (cancer causing) strains of HPV (human papilloma virus), an infection which causes genital and anal warts.

The following factors can put you at greater risk of developing anal cancer:

- A history of cervical or vaginal cancer, or abnormal cells of the cervix, likely to be linked with HPV or smoking.
- A lowered immune response as a result of another condition or treatment for other illnesses which suppress your immune system, such as HIV, or following organ transplantation.
- Smoking tobacco has been shown to increase the risk of developing many cancers, including cancer of the anus.
- Although rare, it is more prevalent in people over the age of 50, and in younger adults with HIV infection.
- Some data suggests that people with a high lifetime number of sexual partners, are at higher risk. This may be due to the increased risk of contracting HPV.

Unfortunately, some people get anal cancer for no clear reason.

## **Symptoms**

The symptoms of anal cancer are very similar to other problems, including haemorrhoids (piles) or anal fissures (tears). The most common symptom is rectal bleeding or blood in the stools (poo), with almost half of all patients affected in this way.

Other symptoms include:

- Small lumps seen or felt around the anus which could be confused with piles.
- An increase in the number or size of piles.
- Pain in the anal area – affects about 30% of people.
- Difficulty in passing stools and extreme constipation are common symptoms.
- Feeling a continuous urge to pass a motion, with no production, possibly with increased mucus.
- Discharge from the back passage, or swelling, itching and persistent redness or soreness around the anal area.
- Difficulty controlling your bowels (faecal incontinence).
- One or more lumps in the groin area.



### **Beating Bowel Cancer**

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## How is it diagnosed?

Your GP will take a history of your health and current symptoms. S/he is likely to do a physical examination of the abdomen, and a detailed visual and digital examination (using a gloved finger) of the anus and rectum (back passage). S/he may also request a blood test to check for anaemia and any underlying health problems. If your GP suspects that you may have cancer, s/he will refer you urgently to a hospital colorectal specialist for diagnosis.

**Special tests** at the hospital may include:

- Proctoscopy – insertion of a short, illuminated tube for looking into the rectum.
- Ultrasound scan using a probe inserted into the rectum.
- Biopsy of any abnormal lumps or tissue for microscopic examination (usually under general anaesthetic as this is more comfortable).

If the test results show any suspicious findings you will then be referred for a colonoscopy, a CT scan of chest, abdomen and pelvis and a pelvic MRI (magnetic resonance imaging) scan to help your specialist plan the treatment that is best for you.

## Staging and grading of anal cancer

Anal cancer tumours usually remain within the anal canal. However, cancer cells can spread beyond the tissue of the anus, via the blood stream and/or lymphatic system, throughout the body and most often to the liver and lungs.

The lymphatic system is a network of glands (nodes) linked by fine ducts that transport lymph fluid, as part of the body's defences against disease and infection. When cancer cells enter the lymph nodes, it can cause them to swell, which is why they are checked as part of the cancer staging investigations.

Anal cancer can also spread locally and invade other pelvic organs such as the vagina, prostate gland or bladder.

Knowing what stage a cancer is at will help the doctors decide on the most appropriate treatment pathway for you.

**Stage 0:** also known as anal carcinoma in situ (AIN) or Bowen's disease.

**Stage 1:** the cancer only affects the anus and is smaller than 2cm in size. It has not begun to spread into the sphincter muscle.

**Stage 2:** The cancer is bigger than 2cm in size, but has not spread into the lymph nodes or other parts of the body.

**Stage 3:** The cancer has spread into the lymph nodes, or to nearby organs such as the vagina or bladder.

**Stage 4:** The cancer has spread to other more distant parts of the body, e.g. the liver.

Your consultant will probably use the more complex TNM method of describing your cancer:

**Tumour:** the stage of the tumour and whether it has spread to the lymph nodes

**Nodes:** the extent to which the lymph nodes are involved

**Metastases:** the extent of spread to other organs (also known as secondaries).

## How is anal cancer treated?

Anal cancer is different from colon and rectal cancer and has a different treatment pathway. It is a rare disease, so it is important that your treatment should be managed by a specialist anal cancer consultant within the hospital colorectal bowel cancer team, as part of a multi-disciplinary treatment approach.

Some hospitals don't have this type of specialist team, so you may have to travel to another hospital to get the treatment you need.

If there is anything you don't understand about your diagnosis or the treatment pathway being recommended by your consultant, you should always ask for a clearer explanation and more time to decide if you need it.

Your doctor may offer you entry into a clinical trial or research project, as work to improve treatment options is on-going.

Anal cancer which has not spread is often treated successfully by a combination of chemotherapy and radiotherapy (chemoradiotherapy) given either one after the other, or at the same time.

Three types of standard treatment are used:

### Radiotherapy for anal cancer

You may be given radiotherapy:

- To get rid of the cancer – this is usually in combination with chemotherapy.
- To shrink a tumour to make it easier to remove completely.
- To control the cancer and relieve symptoms it may be causing.

Radiotherapy is often the first treatment used in anal cancer, with or without chemotherapy. Radiotherapy uses repeated treatments of high energy X-rays in small doses to kill cancer cells. The treatments are given Monday to Friday over a period of 5 - 6 weeks, and usually as an out-patient.

*External radiotherapy* means radiotherapy beamed from the outside of your body. *Internal radiotherapy* (brachytherapy) means radioactive material is placed next to the tumour, inside the body. You may have either type or a combination of both as treatment for anal cancer.

### **Side-effects of radiotherapy**

Radiotherapy can cause temporary but significant redness and tenderness of the area treated, which develops gradually after several sessions.

Your radiographer looks out for these reactions, but you should also let them know if you feel any soreness. It is quite common for the skin to get very sore; it may peel, but it should heal quickly. Skin reactions usually settle down two to four weeks after treatment finishes. You may find it more comfortable to wear loose fitting clothes made of natural fibres, until your skin is less sensitive again. You may also be given painkillers to take over this period.

Advice about skin care varies between different hospitals and it is best to follow the instructions given by your own treatment unit. Unless prescribed by your radiotherapist, you should not use creams or dressings on the treatment area. Talcum powder contains tiny metal particles that can make the soreness worse, and should not be used.

Radiotherapy treatment to the anal area can also cause narrowing of the vagina in women. Using a vaginal dilator will help prevent shrinkage of the skin, which tightens as it heals. Used regularly, the dilator helps to gently stretch the vaginal wall. You are recommended to continue using a vaginal dilator indefinitely after the first six weeks of your treatment to keep everything flexible and comfortable for sexual activity (if wished) and for medical examinations.

Vaginal dryness can also be a problem, but it can be alleviated with special creams or gels prescribed by your doctor.

If the tumour has caused loss of proper control over the bowels (leakage) your doctor may advise formation of a stoma before starting radiotherapy (see below).

## **Chemotherapy**

Chemotherapy is usually offered alongside radiotherapy as it can enhance the effect of radiotherapy (chemoradiation). The most common chemotherapy you will be offered is Mitomycin-C in combination with 5FU (fluorouracil). This is given intravenously (into your vein). Sometimes a drug called capecitabine is taken as a tablet instead of 5FU. A typical cycle of treatment would be five weeks, with chemotherapy being given during the first and fifth week alongside radiotherapy.

Some people experience side-effects from this treatment. The most common side-effects of Mitomycin-C include feeling sick (nausea) and being sick (vomiting). You may also experience changes to how your bowel works, such as diarrhoea or passing more wind. You are likely to feel very tired during the treatment, as it can affect your blood cell count and make you anaemic and prone to infections, and you may notice you bruise more easily. Chemotherapy can cause mouth ulcers and soreness, and this may put you off eating, although this is an important time to eat well. Other side-effects include hair loss or thinning of hair. Less common side-effects are kidney and liver problems, skin rashes and fertility problems.

Your medical team will offer advice as to how you can aim to prevent or minimise side-effects. Regular blood tests to check liver and kidney function will be done to identify any problems early. Your team may suggest that you eat regular, small meals, take nutrition supplements, use mouthwashes, and take medication to control bowel function and stop you being sick. It is very important you let the team know of any changes or side-effects - you will be given a direct contact number to call.

## **Surgery**

Surgery may be considered by your specialist anal multi-disciplinary team, depending on the size and spread of the cancer.

Surgery may be used to remove small tumours. It may also be used if the treatment doesn't completely cure the cancer or if there are signs that the cancer has returned. Occasionally it is used to relieve symptoms before treatment can begin.

**Local excision:** This involves removing small tumours on the anal margin. The anal margin is the pigmented skin immediately surrounding the opening of the anus. This does not affect the sphincter muscle, so the bowel continues to work in the same way as normal and continence should not be affected.

**Abdomino-perineal excision:** This is the removal of the anus and rectum. You will require a permanent colostomy, which involves diverting the open end of the bowel to the surface of your abdomen to allow waste to be passed out of the body into a colostomy bag. The opening created on the abdominal wall is known as a stoma.

The idea of a stoma can be very distressing initially. It means a change of body image and has implications for the way a person believes they will be seen by others, particularly partners, close family and friends. However, thousands of people live successfully with stomas in the UK. Special support and advice is available to anyone preparing to have this kind of surgery, allaying those fears and helping with the practicalities of learning how to manage the stoma efficiently.

**Surgery to relieve symptoms:** Occasionally a surgeon will form a temporary colostomy before your chemotherapy and radiotherapy. This may be to relieve pain or incontinence caused by a blockage in your bowel. Whenever possible, the surgeon will reverse the colostomy after a few weeks, once the bowel has healed.

## After treatment care

Following treatment for anal cancer you may experience side-effects for a few months, such as bloating, wind, diarrhoea or even occasional incontinence. This can be distressing, but should be temporary. Talk to your doctor or nurse for advice on how to manage these side-effects and, if problems persist, s/he can refer you to another specialist for treatment. You will be followed up for 5 to 10 years beyond treatment.

## Further information and support

### Beating Bowel Cancer Nurse Advisory Service

**E:** [nurse@beatingbowelcancer.org](mailto:nurse@beatingbowelcancer.org)

**T:** 020 8973 0011

Our online patient forum is a lively community of people who, like you, are living with and beyond anal cancer.

**W:** [community.beatingbowelcancer.org/forum](http://community.beatingbowelcancer.org/forum)

### Bladder & Bowel Community

'Just Can't Wait' toilet cards

**W:** [bladderandbowelfoundation.org](http://bladderandbowelfoundation.org)

**T:** 01926 357220

### Cancer Research UK

**W:** [www.cancerresearchuk.org](http://www.cancerresearchuk.org)

(search for "clinical trials anal cancer")

### Colostomy Association

**W:** [www.colostomyassociation.org.uk](http://www.colostomyassociation.org.uk)

**T:** 0800 328 4257

### Disability Rights UK

Specialist keys for secure public toilets, and regional lists of locations

**W:** [disabilityrightsuk.org](http://disabilityrightsuk.org)

**T:** 020 7250 8191

### HPV & Anal Cancer Foundation

**W:** [www.analcancerfoundation.org](http://www.analcancerfoundation.org)

**T:** 020 7993 5887

### Macmillan Cancer Support

**W:** [macmillan.org.uk](http://macmillan.org.uk) (search for "anal cancer")

**T:** 0808 808 0000

### Pelvic Radiation Disease Association

Support for the effects of radiotherapy

**W:** [prda.org.uk](http://prda.org.uk)

**T:** 01372 744338



If you have any questions or comments about this publication, or would like information on the evidence used to produce it, please write to us or email [info@beatingbowelcancer.org](mailto:info@beatingbowelcancer.org).

