Understanding Anal Cancer
Information for people affected by cancer

This fact sheet has been prepared to help you understand more about anal cancer. Many people feel shocked and upset when told they have anal cancer. We hope this fact sheet will help you, your family and friends understand how anal cancer is diagnosed and treated.

What is anal cancer?
Anal cancer is cancer affecting the tissues of the anus. Cancer is a disease of the cells, the body’s basic building blocks. Our body constantly makes new cells to help us grow, replace worn-out tissue and heal injuries. Normally cells multiply and die in an orderly way.

When cells don’t grow, divide and die in the usual way, they sometimes form a lump called a tumour. If the cells are cancerous, they can spread through the bloodstream or lymph fluid and form another tumour at a new site. This new tumour is known as secondary cancer or metastasis.

About the anus
The anus is the opening at the end of the bowel. It is made up of the last few centimetres of the bowel (anal canal) and the skin around the opening (anal margin). During a bowel motion, the muscles of the anus (sphincters) relax to release the solid waste matter known as faeces or stools.

Types of anal cancer

Squamous cell carcinomas (SCCs)
Most anal cancers are squamous cell carcinomas (SCCs), which come from the flat (squamous) cells that line much of the anus. The term ‘anal cancer’ commonly refers to these SCCs, and this fact sheet focuses on this type of anal cancer.

Adenocarcinomas
A small number of anal cancers are adenocarcinomas, which start from cells in the anal glands. This type of anal cancer is similar to bowel cancer and is treated in a similar way. See Cancer Council's Understanding Bowel Cancer booklet for more information.

Skin cancers
A very small number of anal cancers affect the skin just outside the anus. Known as perianal skin cancers, they are treated in a similar way to skin cancers that are found on other parts of the body. See Cancer Council's Understanding Skin Cancer booklet for more information.

For copies of Cancer Council booklets, call 13 11 20 or visit your local website (see page 4 for details).
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How common is anal cancer?
Every year, about 400 people are diagnosed with anal cancer in Australia. It is more common over the age of 50 and is somewhat more common in women than in men. However, men who have sex with men have the highest incidence of any group. The number of people diagnosed with anal cancer is increasing, with three times more cases in 2011 than in 1984.

What are the risk factors?
About 80% of anal cancer cases are caused by a very common infection called human papillomavirus (HPV). HPV can affect the surface of different areas of the body, including the anus, cervix, vagina and penis. Most people will not be aware that they have HPV as it usually doesn’t cause any symptoms.

Other factors that increase the risk of getting anal cancer include:
- having a weakened immune system, e.g. because of human immunodeficiency virus (HIV), an organ transplant or an autoimmune disease such as lupus
- having anal warts
- being a man who has had sex with other men
- being a woman who has had an abnormal cervical Pap test or cancer of the cervix, vulva or vagina
- having multiple sexual partners and unprotected anal sex
- smoking
- being over 50.

What are the symptoms?
In its early stages, anal cancer often has no obvious symptoms. However, some people may experience symptoms such as:
- blood or mucus in stools (faeces) or on toilet paper
- itching, discomfort or pain around the anus
- a feeling of fullness, discomfort or pain in the rectum
- a lump near the edge of the anus
- ulcers around the anus
- difficulty controlling your bowels.

Not everyone with these symptoms has anal cancer. Other conditions, such as haemorrhoids or tears in the anal canal (anal fissures), can also cause these changes. However, if the symptoms are ongoing, see your general practitioner (GP) for a check-up.

Diagnosis
The main tests for diagnosing anal cancer are:

**Physical examination** – Your doctor inserts a gloved finger into your anus to feel for any lumps or swelling. This is called a digital anorectal examination (DARE).

**Proctoscopy with biopsy** – A small, rigid instrument called a proctoscope is inserted, with lubricant, into the anus to see the lining of the anal canal. This may be done under a local or general anaesthetic so that a tissue sample (biopsy) can be taken at the same time. The biopsy will be sent to a laboratory for testing.

If anal cancer is diagnosed, you will have further tests to check whether it has spread. Most people will have a colonoscopy, which is an examination of the large bowel (colon). You may also need one or more imaging scans, such as an MRI, an endorectal ultrasound, a CT scan or an FDG-PET scan. To find out more about these tests, visit your local Cancer Council website or call Cancer Council 13 11 20.

**Staging**
Staging describes how far the cancer has spread. Knowing the stage helps doctors plan the best treatment for you. Anal cancer is staged using the TNM (Tumour Nodes Metastasis) system.

<table>
<thead>
<tr>
<th>T (Tumour) 0–4</th>
<th>Indicates how far the tumour has grown into the bowel wall and nearby areas. T1 is a smaller tumour; T4 is a larger tumour.</th>
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</thead>
<tbody>
<tr>
<td>N (Nodes) 0–3</td>
<td>Shows if the cancer has spread to nearby lymph nodes (small glands). N0 means no cancer is in the lymph nodes; N1 means cancer is in the lymph nodes around the rectum; N2 means cancer is in pelvic and/or groin lymph nodes on one side; N3 means cancer is in pelvic and groin lymph nodes on both sides.</td>
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<tr>
<td>M (Metastasis) 0–1</td>
<td>Shows if the cancer has spread to other, distant parts of the body. M0 means cancer has not spread; M1 means cancer has spread.</td>
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Treatment
Your doctor will recommend the best treatment for you, depending on the type and location of the anal cancer; whether the cancer has spread (its stage); your age and fitness; and your preferences.

Most anal cancers are treated with a combination of radiotherapy and chemotherapy, which is known as chemoradiotherapy. Surgery may also be used in some cases (see next page).

Understanding the available treatments and possible side effects can help you weigh up the pros and cons of different treatments. You may want to get a second opinion from another specialist to confirm or clarify the doctor’s recommendations.

Chemoradiotherapy
Also known as chemoradiation, this treatment combines a course of radiotherapy with some chemotherapy sessions. The chemotherapy makes the cancer cells more sensitive to the radiotherapy. For anal cancer, a typical treatment plan might involve a session of radiotherapy every weekday for several weeks, as well as some days with chemotherapy during the first and fifth weeks. This approach avoids surgical removal of the anus in most people and allows for lower doses of radiotherapy.

Chemotherapy – This is the treatment of cancer with anti-cancer (cytotoxic) drugs. It aims to kill cancer cells while doing the least possible damage to healthy cells. For anal cancer, the chemotherapy drugs will usually be given into a vein through an intravenous (IV) drip.

Radiotherapy – This uses radiation, such as high-energy x-rays, gamma rays, electron beams or protons, to kill or damage cancer cells so they cannot grow or multiply. The radiation is targeted to the location of the cancer, and treatment is carefully planned to do as little harm as possible to the normal body tissue around the cancer.

During a treatment session, you lie under a machine that delivers radiation to the treatment area. It can take 10–20 minutes to set up the machine, but the treatment itself takes only a few minutes and is painless. You will be able to go home afterwards.

Side effects of chemoradiotherapy
Both chemotherapy and radiotherapy can have side effects, but many side effects are temporary and there are ways to prevent or reduce them.

Side effects of chemoradiotherapy can include:
- tiredness
- nausea, vomiting and diarrhoea
- appetite loss
- needing to pass urine more often or leaking urine (incontinence)
- loss of pubic hair
- low resistance to infection – if you have a temperature over 38°C, contact your doctor or go to the emergency department
- sensitivity to light (photosensitivity) and gritty eyes
- sore, reddened skin and ulcers around the anus, genital areas and groin – this can cause intense pain when sitting and during bowel movements
- narrowing and closing up of the vagina (managed with regular use of dilators after treatment)
- effects on sexuality, including painful intercourse and loss of erections
- effects on fertility.

For more information on treatments and managing these side effects, you can read Cancer Council’s Understanding Radiotherapy and Understanding Chemotherapy booklets.

Effects on sexuality and fertility
Chemoradiotherapy for anal cancer can affect fertility. It can also have a range of effects on sexuality, including loss of interest in sex (low libido), changes to the vagina or anus that can cause pain or loss of pleasure during intercourse, and difficulty getting and maintaining an erection (erectile dysfunction). Ask your doctor about ways to manage these changes. You can also read Cancer Council’s booklets on sexuality and fertility.

If you smoke, it is worth making every effort to quit before treatment begins. Smoking can make side effects worse and treatment less effective. Call 13 QUIT (13 7848) for support.
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Surgery
Surgery may be used for very early anal cancer and in a small number of other situations.

Surgery for very small tumours – A form of surgery called local excision can remove very small tumours that have clear edges and are located near the entrance of the anus (anal margin). The surgeon inserts an instrument into the anus to remove the tumours. You will usually have a general anaesthetic.

Abdominoperineal resection – For most people with anal cancer, chemoradiotherapy is the main treatment and is usually very effective. However, a major operation called an abdominoperineal resection may be recommended if you cannot have chemoradiotherapy because you have had radiotherapy to the pelvic region for another cancer. This operation may also be used for anal cancer that remains or comes back after chemoradiotherapy.

In an abdominoperineal resection, the anus, rectum and part of the colon (large bowel) are removed. The surgeon uses the remaining colon to create a permanent stoma. Also called a colostomy, this stoma is an opening in the abdomen that allows faeces to leave the body. A stoma bag is worn on the outside of the body to collect the faeces. For more information, see Cancer Council’s Understanding Bowel Cancer and Understanding Surgery booklets.

Follow-up appointments
After treatment, you will need check-ups every 3–12 months for several years to confirm that the cancer hasn’t come back. Between visits, let your doctor know immediately of any health problems.

Questions for your doctor
You may find this checklist helpful when thinking about the questions you want to ask your doctor.

• What type of anal cancer do I have? What part of the anus is affected?
• Has the cancer spread?
• What treatment do you recommend and why?
• Are there any other treatment options for me?
• What are the risks and possible side effects?
• Will the treatment affect my sexual function or pleasure? How can any impact be managed?
• Will the treatment affect my fertility?
• Are there any clinical trials or studies I could join?
• How often will I need check-ups?
• Can I pass on HPV to my partner? Should I or my partner get vaccinated against HPV?
• If the cancer comes back, how will I know?

Need to know more?
Call Cancer Council 13 11 20 for more information about anal cancer. Trained health professionals can listen to your concerns and put you in touch with local services. You can also ask for free copies of our booklets, or download digital versions from your local Cancer Council website:

- ACT actcancer.org
- NSW cancercouncil.com.au
- NT nt.cancer.org.au
- QLD cancerqld.org.au
- SA cancersa.org.au
- TAS cancertas.org.au
- VIC cancervic.org.au
- WA cancerwa.asn.au

Acknowledgements
This information is based on clinical practice guidelines for anal cancer and has been developed with help from a range of health professionals and people affected by anal cancer. It was reviewed by: A/Prof Richard Hillman, Sexual Health Physician, Western Sydney Sexual Health Centre and University of Sydney, NSW; A/Prof Martin Borg, Radiation Oncologist, Adelaide Radiotherapy Centre, SA; Mr Chip Farmer, Colorectal Surgeon, The Alfred Hospital, Cabrini Hospital and The Avenue Hospital, VIC; Judy Koch, Consumer; Stephen Leppard, Consumer; Caitriona Nienaber, 13 11 20 Nurse, Cancer Council Western Australia, WA.

Note to reader
Always consult your doctor about matters that affect your health. This fact sheet is intended as a general introduction and is not a substitute for professional medical, legal or financial advice. Information about cancer is constantly being updated and revised by the medical and research communities. While all care is taken to ensure accuracy at the time of publication, Cancer Council Australia and its members exclude all liability for any injury, loss or damage incurred by use of or reliance on the information provided in this fact sheet.