Testicular cancer

Summary

- Testicular cancer is not common and most testicular lumps are not cancer.
- Men aged between 25 and 44 years are most at risk.
- Early diagnosis and treatment can cure almost all cases of testicular cancer.

Testicular cancer is an uncommon cancer that occurs mainly in men aged between 25 and 44 years. About 165 Victorian males are diagnosed with this cancer each year. In most cases, testicular cancer is curable.

The testicles (testes) are two small, oval-shaped organs located behind the penis in a skin sack called the scrotum. They are part of the male reproductive system. Sperm and sex hormones are made by the testicles.

Causes of testicular cancer

Testicular cancer is a relatively rare disease in Australia. The exact cause remains unknown, but there are several factors that may increase a man’s risk of developing testicular cancer.

These risk factors include:

- Undescended testes (cryptorchidism) – men born with undescended testes are more likely to develop testicular cancer. Surgical correction of the undescended testes can reduce but not completely offset this risk.
- A family history – is important if you have a father or brother who has had testicular cancer.
- An abnormality of the penis and urethra, known as hypospadias, means you are twice as likely to develop testicular cancer, compared to other men in the general population.
- Infertility (having difficulty conceiving a baby) – infertility shares a number of risk factors with testicular cancer.
- Human immunodeficiency virus (HIV) – there is some evidence that men with HIV have an increased risk of testicular cancer.
- Personal history – men who have previously had testicular cancer in one testicle are more likely to develop cancer in the other testicle.

There is no known link between testicular cancer and testicular injury. However, injury can often cause swelling and lumps, which can then make detecting testicular cancer difficult. If you have testicular swelling due to an injury, see your doctor for advice.

Self-examination of testes

Cancers that are found early are the easiest to treat. Men should become familiar with the usual level of lumpiness of their testicles and see their doctor if they notice a change. A good time for men to examine their testicles is after a warm bath or shower, when the scrotal skin is relaxed. You should try to get into the habit of doing this regularly.

Some men need to be especially watchful. They include men and boys with a family history (father or brother) of testicular cancer, and men and boys whose testes did not descend normally when they were babies.

Symptoms of testicular cancer

In some men, testicular cancer does not cause any noticeable symptoms. Other men may notice one or more symptoms, including:

- a swelling or lump in the testicle, usually painless
- a feeling of heaviness in the scrotum
- change in the size or shape of the testicle (for example, hardness or swelling)
- a feeling of unevenness between the testicles
- aches or pan in the lower abdomen, testicle or scrotum
- enlargement or tenderness of the breast tissue
- back pain
- stomach aches.

Most testicular lumps are not cancer, but it is important to see your doctor if you have any of these symptoms.

A cancerous lump may be as small as a pea or much larger. In most cases, only one testicle is affected. Sometimes, testicular cancer cells spread into the lymph glands and other organs in the body (most commonly the lungs). If this happens, you may have other symptoms, such as a cough or shortness of breath. Even if testicular cancer spreads, it can usually be cured.

**Types of testicular cancer**
The two main types of testicular cancer are non-seminoma and seminoma.

**Non-seminoma testicular cancer** is:
- a rarer cancer that tends to develop more quickly than seminoma cancers
- more common in younger men, usually in their 20’s
- made up of sub-types that are grouped together, such as teratoma, yolk sac tumour, choriocarcinoma and embryonal-cell carcinoma

**Seminoma testicular cancer:**
- tends to develop slower than non-seminoma cancers
- usually occurs in men aged 25 to 50, but also occurs in men over 60.

Occasionally, testicular tumours can be a mix of both types.

**Diagnosis of testicular cancer**
If you feel a swelling or any other type of unusual change in one of your testicles, it is important to see your doctor.

Diagnosing testicular cancer involves a number of tests, including:
- examination – a physical examination of the testicles
- ultrasound scan – to help distinguish between cancers and lumps due to other causes
- blood tests – many testicular cancers produce a hormone that can be measured in the blood. Doctors call them ‘markers’. There are three different types of markers for testicular cancer.

If the ultrasound results suggest cancer, the affected testicle will need to be surgically removed. The cells from the lump will be examined under a microscope. Unfortunately, this is the only way to confirm testicular cancer. Doctors will only do this operation if they are fairly sure it is cancer.

If your doctor suspects the cancer has spread to other parts of the body, they will do other tests such as a chest x-ray and scans – either magnetic resonance imaging (MRI) scan or a computed tomography (CT) scan.

Test results can take a few days to come back. It is very natural to feel anxious waiting to get your results. It can help to talk to a close friend or relative about how you are feeling. You can also contact the Cancer Council Helpline on 13 11 20 and speak with a cancer nurse.

**Treatment of testicular cancer**
Surgical removal of the affected testicle (orchidectomy) is usually the first treatment for testicular cancer. The testicle can be replaced with a false one called a prosthesis. You can usually go home on the day of surgery. If the cancer has not spread beyond the testicle, this may be the only treatment you will need. However, for a few years, you will have to attend a specialist for regular check-ups.
Losing one testicle doesn’t affect your fertility, providing the remaining testicle is healthy. Your ability to have an erection isn’t affected either. However, if you have both testicles removed, you will be infertile.

If you need further medical cancer treatment or need to have both testicles removed, you may be able to make a sperm bank donation. This will give you the option to father children in the future. It is important to discuss this with your doctor before you go ahead with any treatment.

Further treatment for testicular cancer may include:

- **Radiotherapy** – this involves the use of x-rays to kill cancer cells, while doing as little harm as possible to the normal cells. Radiotherapy may be given to prevent the cancer coming back after surgery or to treat any cancer cells that have spread. Testicular cancer most commonly spreads to the lymph nodes in the pelvis and lower abdominal region. Radiotherapy does not make you radioactive, so it is safe for you to be with other people, including children, after your treatment.

- **Chemotherapy** – this involves the use of anti-cancer medications to kill cancer cells by circulating in the bloodstream and reaching cancer anywhere in the body. This treatment may be given:
  - if the cancer has spread outside your testicle
  - together with surgery, or less commonly, with radiotherapy (adjuvant treatment), if there is moderate risk of the cancer spreading or returning
  - as the primary treatment, if the cancer has spread to other parts of your body.

- **Further surgery** – if the cancer has spread to the lymph nodes in your abdomen and remained after chemotherapy or radiotherapy, the lymph nodes may be surgically removed. This may cause infertility by preventing the ejaculation of sperm through the penis. However, sexual function and the ability to orgasm remain intact.

- **Complementary and alternative therapies** – when used alongside your conventional cancer treatment, some of these therapies can make you feel better and improve your quality of life. Others may not be so helpful and in some cases may be harmful. The Cancer Council Victoria booklet called *Understanding complementary therapies (pdf)* can be a useful resource.

**Research into testicular cancer**

Early detection and better treatment have improved survival for people with testicular cancer. The research is ongoing. The [Cancer Research UK](https://www.cancerresearchuk.org/) website has information about research into testicular cancer.

Clinical trials can test the effectiveness of promising new treatments or new ways of combining cancer treatments. Always discuss treatment options with your doctor.

**Your sexuality and testicular cancer**

A common question asked by men with testicular cancer is whether their sex life will be affected. Having cancer can affect your sexuality in both physical and emotional ways. The impact of these changes depends on many factors, such as treatment and side effects, the way you and your partner communicate, the way you see your changed body, and your self-confidence. Many changes are temporary.

Your medical team should discuss these issues with you before and during your treatment. If you feel you would like to discuss things further, ask your doctor for a referral to a counsellor or speak to a cancer nurse on the Cancer Council Helpline (13 11 20). The Cancer Council Victoria booklet called *Sexuality, intimacy and cancer* may also be helpful to read.

**Caring for someone with testicular cancer**

Caring for someone with testicular cancer can be a difficult and emotional time. If you or someone you know is caring for someone with testicular cancer, there is support available. The Cancer Council Victoria booklet called *Caring for someone with cancer* may also be helpful to read.

**Where to get help**

- Your [GP (doctor)](http://www.betterhealth.vic.gov.au/)
