



# Problems Of The Testes

Important parts of the male reproductive system, the testes (testicles), are oval shaped glands responsible for producing sperm and most of the male hormone testosterone. The testes hang in the scrotum outside the body because sperm production needs a cooler temperature than the inside of the body. Because the testes are outside the main body cavity they are more vulnerable to injury, but also it is easier for a man to discover lumps or bumps. Men experiencing unexplained or ongoing pain, or noticing lumps or changes in their testes are advised to see a doctor immediately.

## Testicular Cancer

### What is testicular cancer?

Testicular cancer is a cancer of the sperm producing cells and is the most common cancer in younger men from puberty until approximately 50 years of age. After 50 years of age, testicular cancer is very rare. Testicular cancer is usually discovered because the man feels a lump or heaviness of the testis. Often this is discovered during self examination while showering. Any change in the testes is worth getting checked.

### What causes testicular cancer?

In most cases of testicular cancer the causes are unknown. Testicular cancer risk is higher in men when there has been any problem with the testes coming down into the scrotum (undescended testes). It is also slightly more common in men with a fertility problem and also more common in the opposite testis if the man has already had a previous testicular cancer.

### What are the treatments?

Treatment is to remove the testis which contains the cancer. Scans are done to check that the cancer has not spread. Depending on the type of testicular cancer and the scan results, there may be a need for additional treatment with cancer chemotherapy (anticancer medicines) or radiotherapy.

Contact Andrology Australia for a free copy of the consumer guide 'Testicular Cancer: lumps and self examination'.

## Undescended Testes

### What are undescended testes?

Undescended testes or cryptorchidism is a condition where one or both testes fail to come down into the scrotum. During pregnancy the testes of the unborn male baby grow in the baby's abdomen. For most boys the testes move down into the scrotum before birth, but for approximately one in every 100 boys the testes fail to come all the way down and in some cases may remain in the abdomen.

### What are the treatments?

If the testes do not descend naturally into the scrotum by 6-12 months then it is necessary for an operation to bring the testes down. The operation should ideally be done before the age of two years because the longer the testes remain in the wrong position, the more likely there will be damage to fertility.

### What are the long-term implications?

Men who had undescended testes as an infant are more likely to develop testicular cancer in their early adult years. Thus regular self-examination of the testes is high recommended for men who have this medical history. Infertility problems are also more common after problems of undescended testes, especially if the problem was not discovered until adolescence or adulthood.

## Lumps in the Scrotum

### Are lumps always cancer?

Most lumps found in the testes are not cancer. Fluid filled cysts (hydrocele and epididymal cysts) are very common especially as men get older. Varicose veins (varicocele) are also common. All testis lumps should be checked by a doctor to ensure that they are not cancer. The best and most accurate check-up is with a testis ultrasound scan.

## Hydrocele

### What is a hydrocele?

A hydrocele is a swelling in the scrotum caused by a build-up of fluid around the testes. This is the most common

cause of swelling around the testes in older men, although it can happen at any age and sometimes follows injury or inflammation. Hydroceles are usually painless but gradually increase in size and can become very large.

In younger men hydroceles may very rarely be a warning of an underlying testis cancer and it is wise to check the testis with an ultrasound scan. In older men, hydroceles are a non-dangerous condition and the usual reason for treatment is because the size of the swelling becomes embarrassing or because of an aching or dragging discomfort.

### What are the treatments?

If the hydrocele causes bother with discomfort or size then a minor operation will correct it. Although it is possible to use local anaesthetic and to drain the fluid with a syringe, this does not work very well as the fluid nearly always comes back again.

## Varicocele

### What is a varicocele?

A varicocele is a swelling of the veins (varicose veins) above the testis. It affects about three in every twenty men and is usually on the left side. These veins first appear at puberty and can sometimes cause bothersome discomfort.

Varicoceles may affect fertility but this is not always the case. The need to treat varicoceles and the benefits gained from treatment are unclear and still under review in the medical community worldwide.

### What are the treatments?

Varicoceles can be treated by a small operation. There is a small incision in the groin and the vein is tied. An alternative treatment is to plug the source vein (embolisation). This is done in the x-ray department through a small needle puncture into a vein in the groin. A very small tube is then threaded into the source vein and is blocked with an expanding plug or special glue!

## Epididymal cyst

### What is an epididymal cyst?

Epididymal cysts are very common and happen at all ages. They are fluid filled cysts arising from the outflow duct of the testis (the epididymis). They are most often felt as a pea-sized swelling at the top part of the testis but they can become larger. An experienced doctor can often diagnose an epididymal cyst from careful examination as they are separate from the testis, but if there is any doubt then the best test is an ultrasound scan.

Epididymal cysts are not dangerous and there is no risk of cancer or any other problem. They may cause bother with size or discomfort.

### What are the treatments?

Treatment is a small operation to remove the cyst or cysts. This is done through an incision in the scrotum. Great care has to be taken in younger men and men of reproductive age because the operation to remove an epididymal cyst can cause scar tissue to form and block the outflow duct of the testis. Young men need to consider this risk. Epididymal cysts can be drained with a syringe under local anaesthetic but this is not advised because epididymal cysts can return and there is a risk of introducing infection each time the cysts are needed.

## Epididymitis

### What is epididymitis?

Epididymitis is the painful inflammation or swelling of the epididymis, which is the outflow duct of the testis. Because the epididymis runs from above the testis, behind the testis to the bottom part of the testis, pain and discomfort from epididymitis is felt in the testis generally. It can be very difficult to tell if the pain and swelling is coming from the epididymis or the testis or both.

### What are the causes?

Epididymitis develops following a viral or bacterial infection. In younger men this is most often sexually transmitted infection such as Chlamydia or gonorrhoea.

In older men this is most often with bacteria that cause urinary infection such as E Coli. Other causes of epididymitis include inflammation against sperm and this can happen after injury or after vasectomy. The problem is also sometimes seen in cyclists because of injury from the saddle.

### What are the treatments?

Antibiotic medicines are normally given to clear the infection and may need to be taken for up to six weeks. However, if the pain is severe and does not subside, treatment can be difficult. Although it is simple to do an operation to remove the painful part of the epididymis, this does not always work as the pain can come back again in the part of the epididymis or testis that is left behind. For this reason before risking surgery it is best to try non surgical treatments including a long course of antibiotics. Removal of an epididymis from one side is equivalent to having a vasectomy on that side, and for any man who may wish to father children this is an important consideration.

## Orchitis and Mumps

### What is orchitis?

Orchitis is the inflammation of the testes. The most common cause of orchitis is mumps virus but it can be caused by other viruses and much more rarely by bacteria.

### How does mumps affect the testes?

The main problem is damage to sperm production particularly if the infection is after the age of 8-9 years which is when the sperm producing cells are starting to grow. This can lead to male infertility. Immunisation against mumps in young children is therefore recommended.

### What are the treatments?

The main treatment is rest and pain suppressing medications. Although antibiotics are often given they probably make little difference. Antiviral treatment has been reported to help in some cases.

## Torsion of the Testis

### What is torsion of the testis?

Torsion of the testis occurs when the testis twists in the scrotum. This cuts off the blood supply to the testis causing the testis to swell up and unless the condition is treated quickly the testis dies.

### What causes torsion of the testis?

Testicular torsion is most common in teenagers or young adults. In some men the testis is not so well attached and torsion is more likely. For this reason, if torsion occurs then the other testis has to be fixed by surgery to prevent the same thing happening on the other side. Torsion can be triggered by physical and sexual activity. It may happen at night, and sudden severe testis pain at night in a young man should be checked in the nearest hospital that night, and not left to the following morning. This is often difficult because the young man may be embarrassed about the problem but those first few hours are vital if the testis is to be saved.

### What is the treatment?

This condition is a medical emergency and immediate surgery is recommended to not only relieve the pain, but also to 'save' the testis. Without a blood supply, the testis will die and after 6-8 hours there is less and less chance of being able to save the testis. During surgery the other testis should be fixed in position as well to stop it twisting.

For a fact sheet on Testicular Self-examination, please visit the Andrology Australia website [www.andrologyaustralia.org](http://www.andrologyaustralia.org)

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