

Testicular cancer

What are the facts about testicular cancer?

The testicles (testes) are two oval-shaped firm organs located in the scrotum. Cancer of the testicle is uncommon but nevertheless accounts for about 1 to 2% of malignant tumours in men. It mainly affects fit young men and is the most common malignancy in men aged 15 to 45 years. Usually only one testicle is affected.

There are two main types of testicular cancer:

- seminoma, which typically occurs between 25 to 50 years
- non-seminoma, which typically occurs under 35 years (from 15 onwards).

What are the symptoms and signs?

- A lump in the testicle which is usually painless
- Loss of sensation in the testicle
- Sensation of heaviness in the scrotum
- Possible ache or pain (in about 15%)

There may be an associated swelling such as a hydrocele or an inflamed testicle.

What is the cause of testicular cancer?

Abnormal cells form and multiply in an uncontrolled way to form the malignant tumour. The exact cause is unknown but the known risk factors are:

- an undescended testicle (5 times the risk)
- an operation to 'fix' an undescended testicle
- withering of the testicle (e.g. following an infection)
- family history of cancer of the testicle
- previous cancer of the testicle
- severe trauma to the testicle
- prolonged heat exposure.

How is it diagnosed?

The cancer is usually diagnosed by:

- the person feeling a lump
- his doctor examining the testicles and scrotum
- ultrasound examination, which is very effective
- blood tests called 'tumour markers'.

How is it treated?

The outlook is very good for most testicular cancers with a 5-year cure rate of 90 to 95% especially if operated on at an early stage. The gold standard of treatment is surgery (an orchidectomy) by a urologist through an incision just above the scrotum. The results are particularly good for seminoma, which are very sensitive to treatment with radiotherapy. Treatment methods include:

- surgery to remove the testicle plus lymph nodes if spread has occurred
- radiotherapy, where X-rays are directed in a concentrated beam at lymph nodes (very effective for seminoma and any cancer cells lying around)
- chemotherapy with cancer-killing drugs—this is very effective for all types of testicular cancer but is used mainly for non-seminoma cancer.

Follow-up management

It is standard practice to perform CT scans of the chest, abdomen and pelvis regularly every few months in the first 2 years and then less often after that.

Serum tumour markers such as alpha-fetoprotein are usually tested at each visit.

What are the after effects of treatment?

Sexual function is not usually affected. The loss of one testicle has little effect on fertility as the remaining testicle usually continues to make ample sperm.

