

Work and Finances Risk factors Symptoms Diagnosis and Treatment Living with or after testicular cancer

Testicular cancer

The testicles are part of the male reproductive system and are responsible for producing sperm. They sit in a pouch of skin called the scrotum which hangs below the body behind the penis. Sperm produced by the testicles is stored in tiny, coiled tubes called seminiferous (or collecting) tubules which join into a larger structure called the epididymis. During ejaculation, sperm travels through the spermatic cord into the ejaculatory duct which joins the urethra (the tube which carries urine from the bladder down the penis to the outside). The male hormone testosterone, which induces puberty and the related body changes, is also produced by the testicles.

The testicles are made up of different types of cells with different functions, including sperm production, protection and nourishment and hormone secretion. Cancer can develop in any of the different types of cells that make up the testicles but the majority start in the germ cells which are responsible for sperm production.

- Germ cell neoplasia in situ (GCNIS) abnormal looking cells are present in the seminiferous tubules but nowhere else in the testicle. This is not cancer and does not cause symptoms, but it can develop into invasive cancer and grow into other areas of the testicles, lymph system and body. Around 50% of men with GCNIS will develop testicular cancer within 5 years.
- Seminoma tumours these cancers grow from GCNIS and usually develop after puberty (post pubertal). Around 55-60% testicular cancers are pure seminomas.
- Non-seminoma tumours these develop from different types of GCNIS cells and sometimes contain a mix of different cell types. Post pubertal teratomas, post pubertal yolk sac tumours, embryonal carcinomas and choriocarcinomas are examples of non-seminoma tumours.
- Mixed germ cell tumours these contain both seminoma and non-seminoma cells and are usually treated in the same way as non-seminoma tumours.
- Prepubertal tumours these tumours do not grow from GCNIS and usually develop in younger children who have not been through puberty. Teratomas and yolk sac tumours are examples of prepubertal tumours. They are usually less aggressive than post pubertal tumours and less likely to spread or return after treatment.
- **Spermatocytic tumours** usually found in older men, these non-GCNIS originating tumours are less aggressive and behave differently to seminomas and non-seminomas. They are unlikely to spread outside the testicle and the treatment for them is usually less intensive.

Testicular cancer is rare, with around 2400 men being diagnosed in the UK each year.

Risk factors

Anyone with testicles can get testicular cancer, including trans women who have not had an operation to remove the testicles and non-binary people born male.

Certain things, some of which can be changed and others which cannot, can increase the risk of developing testicular cancer. Having one or more of these risk factors does not guarantee a diagnosis of testicular cancer and most people who are diagnosed do not have any known risk factors.

- Age testicular cancer is more common in men aged 15 to 49, with most men diagnosed in their early 30s.
- Undescended testicles either current or at birth which has been corrected. This is where the testicle does not drop from the abdomen into the scrotum and can happen on one or both sides.
- Family history having a father or brother with testicular cancer increases the risk of developing it.
- History of testicular cancer having testicular cancer once increases the chance of developing it again in the future.
- Ethnicity testicular cancer is more common in white British men.
- Other medical conditions hypospadias is a condition where the hole through which urine and sperm leave the body isn't located at the tip of the penis. It can be corrected but the increased risk of testicular cancer remains.
- Immune compromising conditions a diagnosis of HIV or AIDS increases the risk of developing testicular cancer.

What is testicular cancer? | Cancer Research UK ->



More information about the types of testicular cancer | Cancer Research UK >



Click here for more about the causes of testicular cancer | NHS ->

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The most common symptom of testicular cancer is a lump or swelling in the testicle and it is important that people with testicles check them regularly so they know what is normal and can identify changes as soon as possible.

- Lump or swelling in part of one testicle
- One testicle getting bigger
- Heavy scrotum
- Discomfort or pain in a testicle or the scrotum.

These symptoms may be caused by something other than testicular cancer, for example an infection, but it is important to get any changes checked by a GP so that the cause is identified quickly.

More information about the symptoms of testicular cancer | Cancer Research UK ->



Click here to view Testicular Cancer UK's guide on how to check testicles

Diagnosis

If you visit the GP with symptoms concerning for testicular cancer they may ask you about your general health and lifestyle as well as the symptoms you have noticed. They will usually examine you and may take some blood tests. They will then make a referral to a specialist at the hospital who will carry out more tests which may include:

- Ultrasound using sound waves to see inside the testicles to determine whether a lump is something concerning or not. Some lumps will be fluid filled cysts which are not concerning.
- Scans including CT scan or MRI which take lots of pictures and put them together to form a 3D image which can show how big the suspicious area is and whether it has spread.

More information about testing for testicular cancer | Cancer Research UK



Treatment

Treatment for testicular cancer depends on the type of testicular cancer, how big it is and whether it has spread to anywhere else in the body. Treatments may be used alone or in combination to maximise their effect.

Treatment for testicular cancer is usually given with the intention of curing the cancer.

- **Surgery** an operation to remove the testicle, known as an orchidectomy, is the most common treatment for testicular cancer and may be the only treatment needed. You may be offered a prosthetic testicle to replace the one that has been removed, and this can be inserted during the same operation. If the cancer has spread to nearby lymph nodes, they may also be removed during the operation. If the cancer has spread to the lungs, you may be offered surgery to treat it.
- Chemotherapy drugs which are toxic to cells are used to kill the cancer. This may be used after surgery to reduce the chance of the cancer returning or for testicular cancer which has come back or spread around the body.
- Radiotherapy targeted radiation is used to kill the cancer. This is used for some types of testicular cancer if they have spread to the lymph nodes in the abdomen.

More information about surgery for testicular cancer | Macmillan Cancer Support



Chemotherapy and radiotherapy for testicular cancer | Orchid





Living with or after testicular cancer

Sex

Removal of one testicle will not prevent a man getting an erection. If lymph nodes must be removed during the orchidectomy operation, there is a chance of damage to the nerves which are involved in ejaculation. Some men will experience retrograde ejaculation, where the sperm travels backwards into the bladder, after surgery. This is not harmful at all and both erection and orgasm are still possible but will feel different as no fluid will be produced. Radiotherapy and chemotherapy will not affect the ability to get an erection or have sex, but chemotherapy may lower sex drive for a while.

Fertility

A single orchidectomy is unlikely to leave a man unable to father a child because the remaining testicle will continue to produce enough sperm and testosterone to compensate, unless it is very small. Before surgery, men may be offered the opportunity to store sperm for future use if there is a chance of retrograde ejaculation because lymph nodes are being removed. If it is not possible to store sperm before the operation and a man is found to have retrograde ejaculation, it may be possible to retrieve sperm for storage.

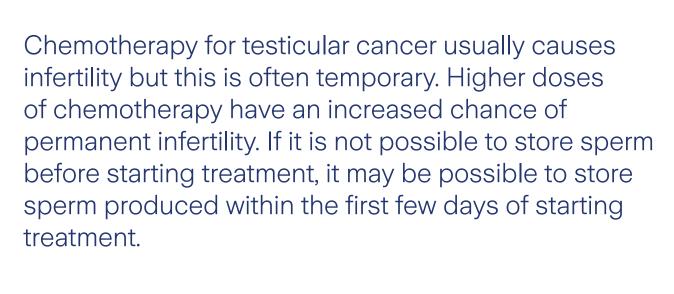
Radiotherapy to abdominal lymph nodes will not usually cause infertility but sperm storage prior to the treatment may be suggested as a precaution.

Testosterone replacement therapy

For a small number of men who have had one testicle removed to treat testicular cancer, their remaining testicle will not produce enough testosterone. If both testicles have been removed to treat cancer, then there will be minimal testosterone production and levels will be low. It is possible to have testosterone replacement therapy in the form of tablets, patches or injections if blood tests show levels are too low.

More about testosterone replacement therapy | Orchid →











Work and finances

Most people will need to take some time off work during cancer treatment either to recover from procedures or manage side effects. While it is not a requirement to tell employers about a cancer diagnosis, it can often help them to offer appropriate support both during time off and on return to work.

Macmillan offer advice for employees and employers about working with cancer:

How to discuss your cancer diagnosis with your employer | Macmillan Cancer Support ->



Macmillan at Work | Macmillan Cancer Support ->



Apart from needing to take time off work, cancer can have a financial impact in other ways, for example, costs of travelling to appointments, needing a warmer house during treatment, etc. Some people on low incomes may be eligible for benefits payments or help with health costs. Hospital cancer units often have access to benefits advisors who can help or may be able to signpost to other organisations such as Maggie's Centres or Citizen's Advice.

It may be possible to claim a one-off, small grant from some charities either for a particular expenditure or for general help. Macmillan have information about grants and loans, including their own Macmillan grants, on their website Grants and loans for people with cancer.

People who have been diagnosed with cancer are entitled to free NHS prescriptions. GPs or hospitals can provide the forms required to apply for a prescription cost exemption certificate and once an application has been made, pharmacists can supply forms to reclaim costs incurred for prescriptions issued while waiting for the certificate.

More information can be found here at Help with NHS prescription costs \rightarrow



Emotional support

A cancer diagnosis can turn the world upside down whether it's you or someone close to you who has received it. Many people hear the word cancer then do not take in anything else that is said during the appointment.

At first, the appointments for tests, scans, consultant discussions and treatment coming one after the other can feel like being carried along by a current with no time to think about or process what is happening.

Lots of resources are often provided in a short time to direct people to organisations that can help or trusted sources of information, but it can be overwhelming and easy to forget what has and has not been said or provided.

Many employers have employee assistance programmes (EAPs) such as the one provided by Zurich, which can offer counselling and advice. Some people find speaking to someone who has been through a similar experience to them helpful, while others prefer to speak to a healthcare professional. There is support out there in many different forms, but it's important to use reliable organisations.

NHS recommended resources

Support **Orchid Fighting Male Cancer**

Emotional, financial and physical help for people with cancer **Macmillan Cancer Support**