your PR.i.VATES

Testicular cancer awareness, advice and support for men in the UK affected by testicular cancer.

Types of testicular cancer

ORCHID
FIGHTING MALE CANCER

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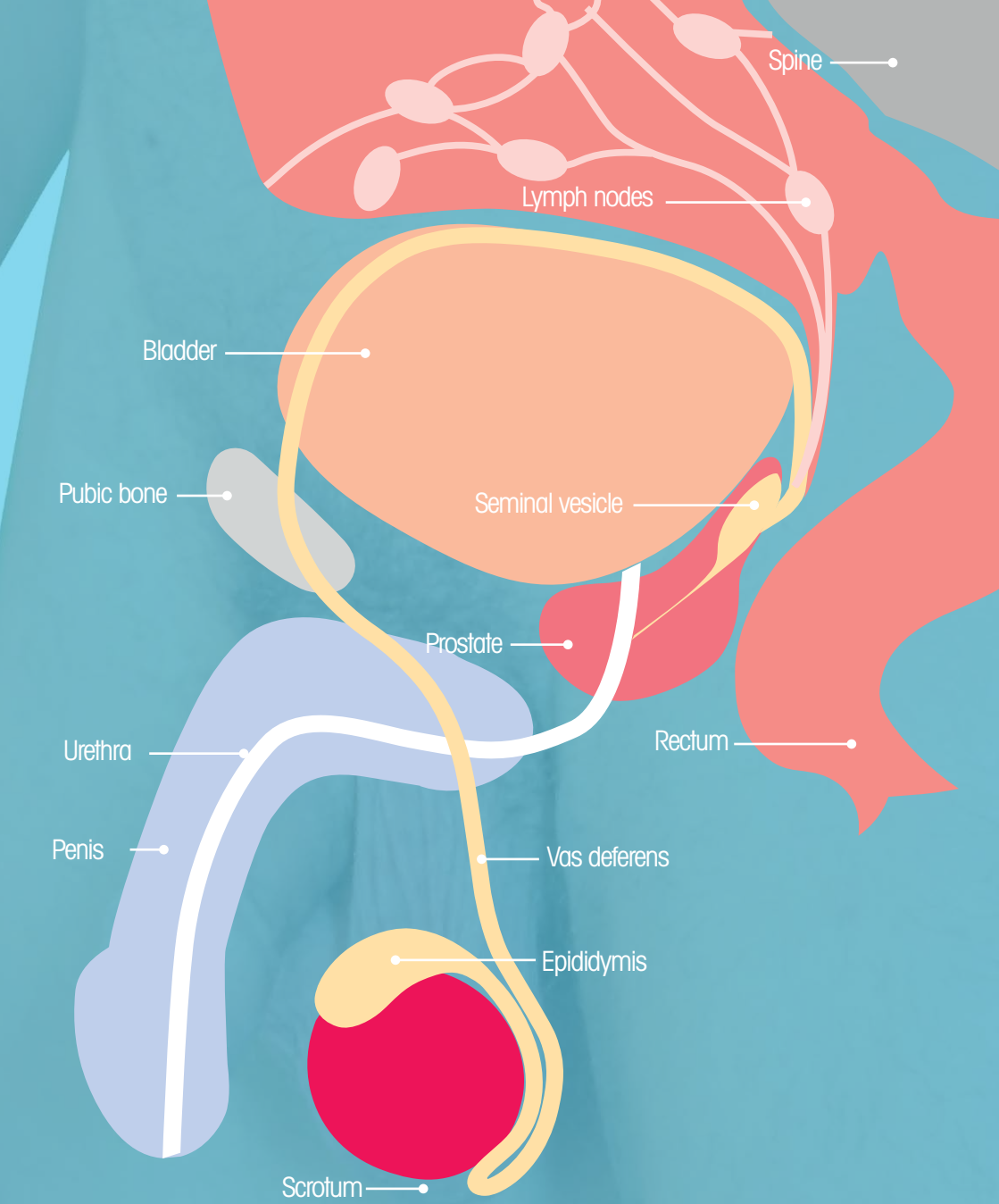


Male pelvic anatomy

Types of testicular cancer

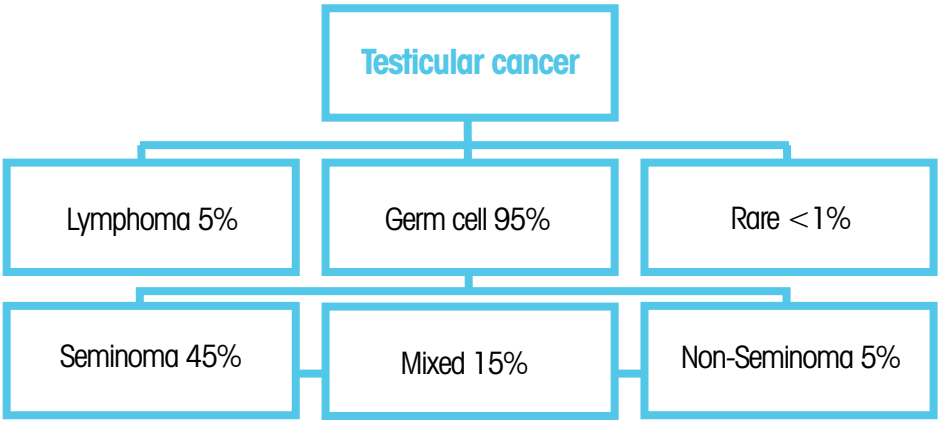
The most common type of testicular cancer is called a seminoma, a slow progressing type of cancer that does not usually spread to other areas of the body. This type of cancer is more common in men between the ages of 25-55, with a peak age of 35 years old.

A rarer type of testicular cancer is called a non-seminomatous germ cell tumour (NSGCT). It used to be called a teratoma. This tends to affect men between the ages of 15-35, with a peak age of 25 years old.

Both of these tumours are also known as germ cell tumours. About 95% of testicular cancers will be germ cell cancers. Germ in this term means "seed" and refers to the sperm making process. Other tumours (mixed cell tumours) may contain elements of both types of the above.

Other rarer non germ cell tumours (Sertoli, Leydig) account for only a small percentage of testicular cancers. In addition 4% of men with lymphoma, usually over the age of 50 years may also have similar symptoms to testicular cancer with testicular swelling.

Summary of the incidence of testicular tumors



Classifying testicular cancer

Once your testicle has been analysed by a histo-pathologist (tissue specialist), it will be possible to identify the type of testicular cancer that is present.

There are two common ways of classifying testicular cancer and whether it has affected other areas in the body. The first is called the TNM system and is a universal method used for most cancers where;

T stands for tumour size (given a value of 1-4 indicating how big it is)

N stands for affected (positive) lymph nodes

M stands for metastases

T

TIS (testicular carcinoma insitu). Cancer cells are within the testes but they have not invaded the surrounding testicular tissue

T1 Tumour confined to testicle and epididymis

T2 Tumour has begun to infiltrate the blood vessels or lymph nodes close to the testicle

T3 Tumour has grown as far as the spermatic cord and possibly blood vessels and lymph nodes

T4 Tumour has invaded the scrotum

N

Lymph nodes are part of the body's natural drainage system and are essential for a healthy immune system. They act as filters, which eliminate waste products from the body. These waste products travel along the lymphatic drainage system where they collect at the lymph nodes. If one lymph node does not manage to filter out these substances they will travel to the next lymph node. Cancer is able to travel through the lymphatic system in the same way and become deposited in other areas of the body. The lymph nodes usually affected by testicular cancer are called the para-aortic nodes.

N0 lymph nodes do not contain cancer cells

N1 lymph nodes are smaller than 2cm wide

2 At least one lymph node is larger than 2cm but smaller than 5cm wide

N3 At least one affected lymph node is bigger than 5cm

M

Metastases are deposits of cancer which form as a result of the primary cancer travelling to other organs in the body or bones. They are sometimes referred to as "secondaries".

Testicular cancer which has spread from its primary site in this way tends to be deposited in the lungs, liver or brain.

M0 There is no evidence that the cancer has spread to other organs

M1a The cancer has spread to the lungs or distant lymph nodes furthest away from the testicle.

M1b Organs such as the liver or brain have been affected

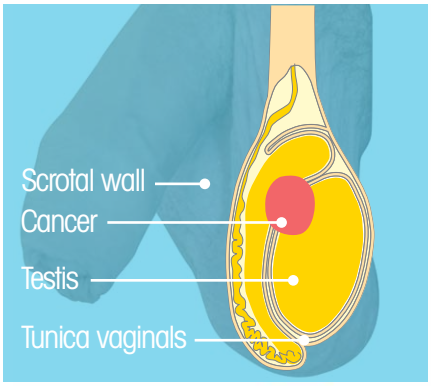
A further way of categorising testicular cancer is to split it into 3 stages.

The results of your tumour markers can also be added to either of these systems to predict possible treatment success. This is denoted as **S** where **S** stands for **Serum markers**.

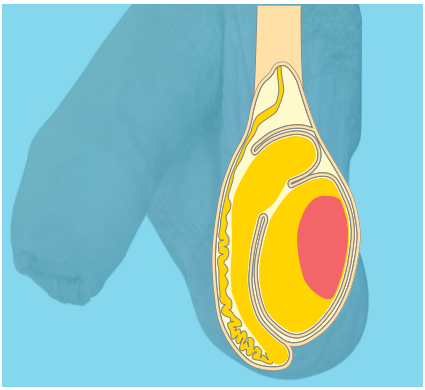
- **SX**: Tumour marker studies not available or not performed
- **S0**: Tumour marker levels within normal limits
- **S1**: LDH < 1.5 X Normal and HCG < 5,000 and AFP < 1,000
- **S2**: LDH 1.5-10 X Normal or HCG 5,000-50,000 or AFP 1,000-10,000
- **S3**: LDH > 10 X Normal or HCG > 50,000 or AFP > 10,000

Testicular cancer staging (TNM system)

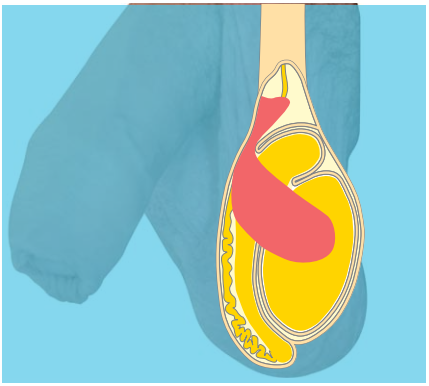
T_1



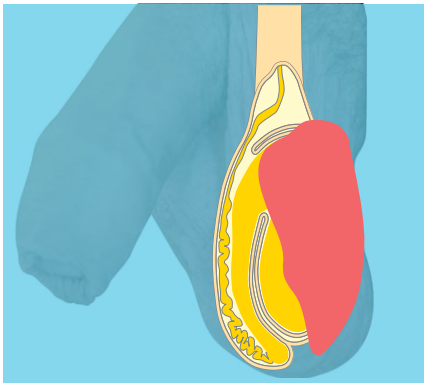
T_2



T_3



T_4



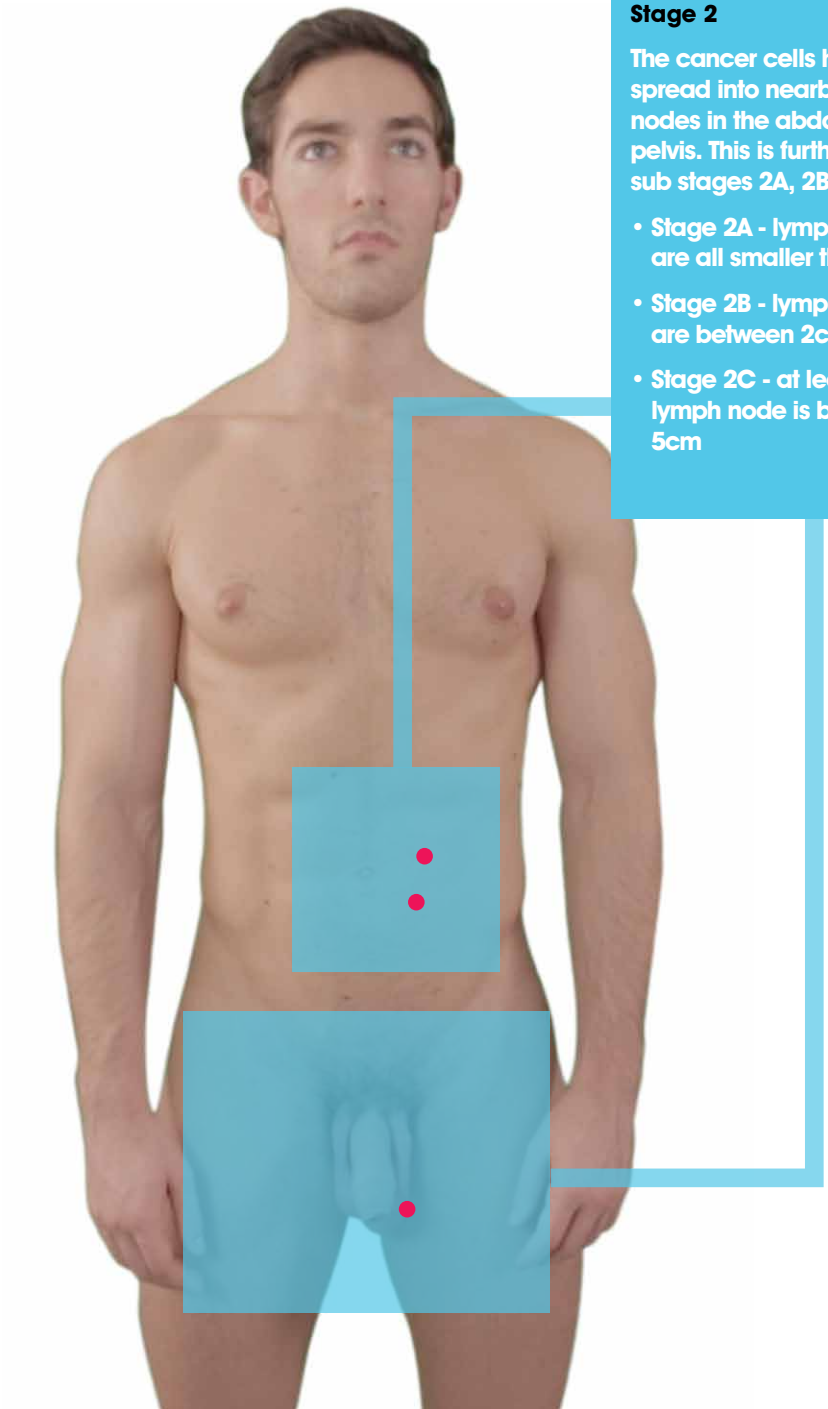
T_{1-4} N_0 M_0

Stage 1

This is the earliest stage of testicular cancer

- **The cancer is contained within the testicle and has not spread to nearby lymph nodes or other organs**

T_{1-4} N_{1-3} M_0

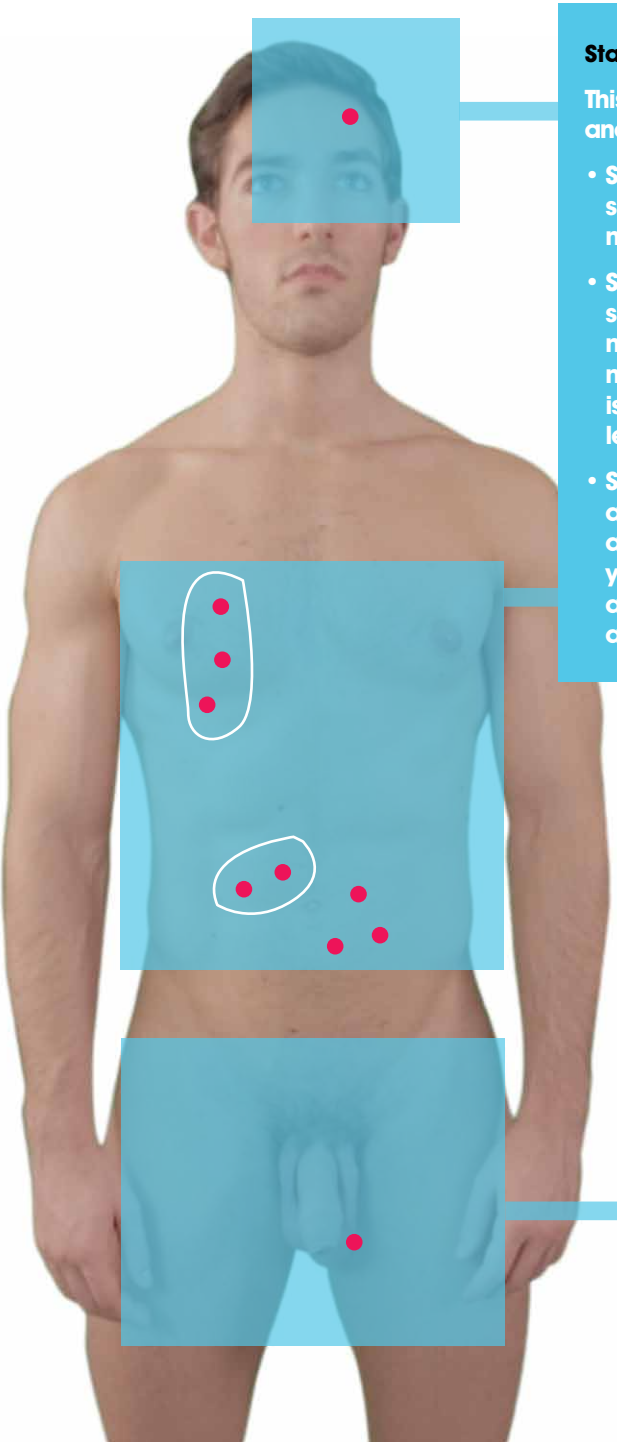


Stage 2

The cancer cells have spread into nearby lymph nodes in the abdomen or pelvis. This is further split into sub stages 2A, 2B and 2C.

- Stage 2A - lymph nodes are all smaller than 2cm
- Stage 2B - lymph nodes are between 2cm and 5cm
- Stage 2C - at least one lymph node is bigger than 5cm

T_{1-4} N_{1-3} M_1



Stage 3

This can be split into 3A, 3B and 3C.

- **Stage 3A - cancer has spread to distant lymph nodes or lungs**
- **Stage 3B - cancer has spread to nearby lymph nodes or distant lymph nodes and lungs and there is a moderately high marker level**
- **Stage 3C - can be the same as stage 3B but you have a very high marker level or your cancer has spread to another body organ, such as the liver or brain**