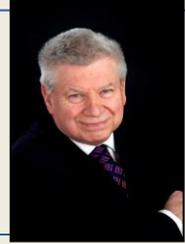


Medicine for Managers

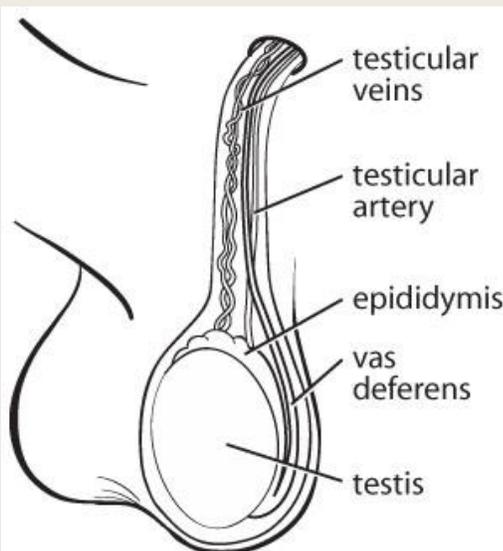
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I've found a lump in my Testicle

As a GP I have noticed over the years an increasing awareness in men of the presence of lumps in and around the testicles. Most such lumps are harmless and may not even require any treatment but a small proportion are sinister. Treatment of testicular cancer has progressed and the success rate is now very high but, to be treated, they have to be found and regular checks are important.

Anatomy: The two testicles are housed in the scrotum. The word **testicle** comes from the Latin word **testiculus** (or its diminutive form **testis**) which means a witness of virility. Their function has been known since before the ancient Egyptians but some beliefs have been confused as, for example, that of Aristotle that tying off the left testicle was necessary if a man wished to have a son.



The testes are ovoid and each about the size of a small plum. They are smooth to the touch.

They are each suspended in the scrotum from a spermatic cord and anchored in the scrotum by a scrotal ligament. The internal anatomy of the testis is complex but includes a huge number of minute coiled tubes called **seminiferous tubules** where sperm are manufactured. These tubules are collected together and empty into the **epididymis** which is a comma-shaped structure composed of fine tubules. The epididymis collects the seminal fluid and transports it on to the **vas deferens** on each side which in turn passes from the scrotum into the abdomen to the base of the bladder where prostatic fluid is added to produce the final ejaculate which is stored in seminal vesicles until required.

The development of lumps may be rapid, often associated with pain, or more gradual and usually without symptoms.

Acute painful lumps

- a. **Testicular torsion.** This occurs when the testicle twists on its spermatic cord and, in doing so, cuts off its own blood supply. The testis becomes tender and

swollen with pain in the scrotum (usually) radiating up to the abdomen. It is a surgical emergency because, if uncorrected, the testicle dies. This is most common in teenage boys.

b. **Orchitis and epididymo-orchitis.**

Orchitis is inflammation of the testis (coming from the Greek word **orchis** meaning a testicle). Inflammation of the testis and/or the epididymis is usually due to infection passed from the urinary tract or from a sexually transmitted disease or occasionally from mumps. The testis rapidly becomes swollen, hot and painful with the general affects of infection such as a temperature and feeling unwell.

Treatment is normally with antibiotics.

- c. **Haematocoele.** This is a collection of blood around the testicle and usually occurs following the proverbial kick often in a sporting injury. Rapid swelling and pain are features and treatment is by surgical drainage as required.

Painless lumps

- a. **Varicocoele.** This is a group of dilated (varicose) veins in the scrotum in association with one or both testes. They are common and affect more than 10% of men, usually below the age of 25. They are generally painless and cause no symptoms. They may be left untreated or, on occasion, the veins are tied off in a small surgical procedure.
- b. **Hydrocoele.** This is a collection of fluid in the scrotum, usually affecting men over age 40. They are generally painless but may cause discomfort because they gradually increase in size and may

become very large. Treatment is by excision of the cystic swelling.

- c. **Epididymal Cyst.** It is a fluid filled cyst situated on top of the testis. It is harmless and, on examination, can be distinguished from a testicular swelling because it can be felt to be separate. They tend to occur in middle-aged men.
- d. **Spermatocoele.** It is a cyst which develops in the epididymis on the upper pole of the testis. It is harmless and painless and usually contains milky fluid which might contain sperm. It may be caused by a blocked sperm-carrying tubule. If it is large enough to cause discomfort a small surgical procedure may be undertaken.
- e. **Inguinal Hernia.** Normally felt in the low abdomen a hernia may pass down the tube from the abdomen to the scrotum through which the testes pass during development and appear as a swelling in the scrotum. Normally such herniae are treated surgically.

Testicular cancer

Only about three percent of testicular lumps are cancerous. They are often symptomless or may cause a dull ache. Nineteen out of every twenty testicular cancers arise from germ cells, that is the cells that make sperm. There are two types, **seminomas** and **non-seminomas**. They occur in about equal numbers each being 40-45% of the total. Seminomas grow more slowly than non-seminomas.

- a. **Seminomas.** 95% are classical and develop in men age 25-45. 5% are called spermatocytic seminomas and arise in

men around 65-70. They grow slowly and are less likely to spread.

- b. **Non-seminomas.** Usually occur between age 15 and 30. There are a variety of forms which, under the microscope, may show a variety of different types of embryonic cell.
- c. **Other rarer cancers** which account for less than 5% of the total.

Testicular cancers account for only 1% of male tumours and about 2,500 cases a year are diagnosed. However, it is the most common cancer to affect men between 15 and 49. The annual incidence is rising and the tumour is much more common in white than black men. The cause of testicular cancer is largely unclear but a family history and being born with undescended testicles increase the chance of developing the cancer.

Over 95% of men with early stage testicular cancer are cured. If it has spread outside the testis, the chance of cure is still about 80%.

Suspicion is usually raised by examination. An urgent ultrasound will usually identify the nature of a swelling. Referral is to a urologist by the usual two-week rule procedure.

Treatment of testicular cancer is by surgical removal of the diseased testis and by chemotherapy which is very effective. Less commonly radiotherapy is employed. For men who lose a testis to cancer a prosthetic testis can be inserted to restore appearance.

Men should check their testicles regularly. There are many jokes about men feeling their

testicles twenty times a day but the reality is that, until recently, they have been poor at checking.

The procedure is best done after a bath or shower when the scrotal muscles are relaxed and the testes can be most easily felt.

The scrotum should be held in the hand and each testicle felt carefully from top to bottom using the fingers and thumb. If there is any doubt at all that the testicle does not feel smooth or any sort of lump is present, the man should see his GP.

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