

Edith Cavell Hospital Department of Urology



Treatment of a Varicocele - a Patient's guide

What is a Varicocele?



A varicocele is an abnormal collection of dilated veins within the scrotum. The condition is said to occur in 1 in 10 normal men and is predominantly seen on the left side of the scrotum (in 15% of cases both sides of the scrotum are affected). The varicocele is usually much more prominent when you stand up.

What Symptoms does a varicocele cause?

A "dragging" feeling in the scrotum is common. Many men who turn out to have a varicocele are referred to our clinics because of difficulty conceiving a child with their partner. There is an association between having a varicocele and a reduced sperm count in some cases.

Do I need any treatment for a varicocele?

In the past treatment was provided for men in two main circumstances

- Where there was evidence of significant discomfort which the patient wanted alleviating
- Where a man had been found to be sub fertile and a varicocele had been detected.

When fertility is not an issue and the pain is not very severe then the general advice would be that the varicocele is not serious and no treatment is required. This is always open to reassessment if the varicocele becomes more painful subsequently.

There has been a recent trend to offer treatment to younger men and teenage boys before any suspicion of subfertility becomes evident. This is because it is now believed that earlier intervention to treat a varicocele might reduce the chances of problems with fertility in the future

What treatments are available?

- Varicocele Ligation
- Embolisation of the Varicocele
- Laparoscopic Surgery

Varicocele ligation

This term refers to a surgical operation to ligate (tie off) the distended veins as they run through the groin into the scrotum (from the abdomen). A cut is made in the left groin approximately 5 to 10 cm long. The veins are identified and tied off and the wound closed with absorbable sutures.

The procedure is usually performed as a day case under a general anaesthetic, and takes approximately 45 minutes to perform. You will normally need two weeks or more away from work (depending on your job).

Complications of a Varicocele Ligation

A collection of fluid (known as a hydrocele) may develop around the testicle in up to 15% of cases. If this is quite large it may need a subsequent operation to deal with it effectively. There is a risk of damage to the testicular artery, which supplies the testicle. This artery runs along with the veins and can be very difficult to spot during surgery. It is likely that in the majority of cases it is tied off along with the veins. This usually does not matter because the testicle can get a good enough blood supply from the artery that runs with the vas deferens (which is left intact). In some cases this other artery is not large

enough to supply the testicle. If this happens the testicle may become inflamed after the operation, and may subsequently shrink (atrophy). If you are an older man who has finished having a family this might have very few consequences for you, but if you are still considering having a family you should understand that this complication might lessen your chances of fathering a child.

- The exact rate of occurrence of testicular atrophy after this operation is not known but is thought to be less than 10%
- Recurrence of the varicocele occurs in anything between 0.6 and 45%

Embolisation of a varicocele

This technique does not involve an operation. This procedure is performed in the x-ray department by one of the Consultant Radiologists under a local anaesthetic. A small cut is made over the groin on the right side.

The Radiologist then passes a small wire up the large leg vein and then eventually guides it into the veins draining the left scrotum. At our hospital a small metal coil is placed into this vein to block it off. This has the same effect as the surgical procedure to tie off the veins.

This procedure is also done as a day case stay but occasionally patients need to stay overnight for observation.

The advantages of this procedure over the surgical procedure include:

- A very small risk of developing a hydrocele (See above)
- Virtually no risk of damage to the testicular artery (see above) and therefore testicular atrophy

Complications include:

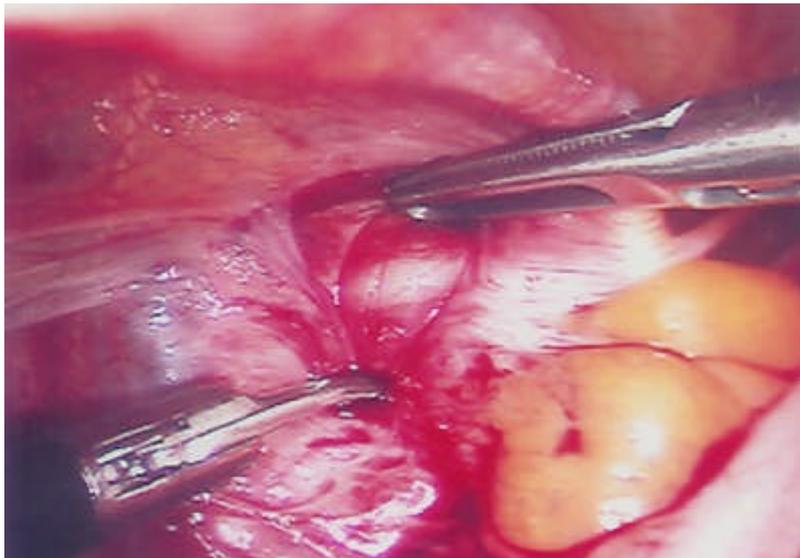
- Migration of the coil out of the vein
- Allergic reactions to the x-ray contrast dye
- Bleeding from the right groin where the wire is inserted

The recurrence rate after this procedure is approximately 4-11%

Laparoscopic Techniques to treat varicoceles

This technique involves tying the distended veins inside the abdomen using a telescope. The procedure requires a general anaesthetic but can also be done as a day case.

The rate of recurrence and complications has not yet been determined. Potential complications include injury to the bowel, blood vessels or other organs. Laparoscopic varicocelectomy takes approximately one hour compared to an open surgical repair which usually takes anything between half an hour to 45 minutes (see above)



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