**Varicoceles** is an abnormal enlargement of the veins in the scrotum.

Around the testicles are a network of veins called the *pampiniform plexus*. The veins contain valves in order to assist in returning blood back to the heart. These valves may become incompetent or malfunctioning. Defective valves or compression of the vein by a nearby structure can cause dilatation of the veins near the testis, leading to the formation of a **varicocele**.

Essentially this is the same process as varicose veins, which are common in the legs. Consequence of the backflow of blood into the *pampiniform plexus* leads to the blood in the veins pooling around the testes.

**Varicoceles** are usually first noticed in male patients between the ages of 15-35. They are common, affecting 8-20% of the general male population, and around 40% of sub fertile men. The majority of **varicoceles** tend to occur in the left testicle. This is due to a number of anatomical differences between the left and right testes.

**Symptoms**

- Heaviness or a dragging sensation in the testicles
- Scrotal pain
- Testicular atrophy (shrinking of the testicles)
- Unsightly appearance - enlarged bluish scrotum
- Subfertility

The subfertility is due to problems with temperature regulation of the testicles. The testicles should ideally be two to three degrees below the body temperature for optimal production of sperm.

When the testicular blood pools in the testes, this raises the temperature of the testes, impeding sperm production.

**Diagnosis**

Varicoceles can usually be diagnosed from a clinical history and examination of the testicles. Varicoceles may be plainly visible on inspection or able to be felt on examination.

To accurately diagnose a varicocele, your Doctor will need to physically examine the testicles. The varicocele can only be felt through the scrotum as a swelling on the outside of the testicle. Often the varicocele can only be felt when standing, and disappears when the patient is lying down as the blood pressure to it falls.

Small varicoceles may only be identified on bearing down. Scrotal ultrasound with colour Doppler is used for diagnosis.

**Treatment Options**

**Endovascular WA** offers patients suffering from varicoceles effective treatment using interventional radiology.

Our treatment, known as **Varicocele Embolisation** is a minimally invasive, safe and recognized treatment. Most patients may go home within four hours of the procedure and have a faster recovery time compared to surgery.

Unlike varicocele surgery, embolisation requires no incision, stitches, or general anaesthesia. Studies have shown that embolisation patients return to full activities by the next day or so however varicocele surgery patients need to avoid any strenuous activity for one week.

**Complications**

Some complications of varicocele surgery, such as hydrocele (fluid around that testicle) and infection are very rare following embolisation. Inadvertent embolisation materials used for embolisation can escape to other veins and lungs.

**Benefits of Endovascular WA’s treatment**

- The treatment is minimally invasive, which means patients walk in walk out (however you will need a driver to get you home).
- No scarring
- No general anaesthetic
- Good success rate
FAQ about Varicoceles

Q. Will the procedure hurt?
A. You will be given a local anesthetic and sedation so you will feel minimal pain during the procedure.

Q. Will it affect my fertility?
A. It can improve fertility in some cases.

Q. Will it affect my sexual function?
A. There is no evidence that varicocele embolisation effects your sexual function.

Q. How long will I need to rest for?
A. You will need to rest for the rest of the day after surgery but you can normally return to work the following day. No strenuous activity involving lifting >10kg for 1 week.

Q. Do I need a general anesthetic?
A. You will be given a local anesthetic and sedation.

Q. How long will the procedure take?
A. The procedure itself only takes about one hour. You will be able to go home a few hours following the procedure.

Q. How common are varicoceles?
A. Up to 20 per cent of all men have a varicocele, but up to 40 per cent of men who have fertility problems have a varicocele.

Patient Preparation

Prior to a procedure for the treatment of varicose veins, patients are required to complete the following;

i. Ensure you have someone to take you to and from the clinic on the day of your procedure
ii. Make sure you have returned your signed information to our Patients’ Service team at reception
iii. Have a shower on the morning of your procedure
iv. Wear comfortable loose clothing

Post Procedure Patient Care

You will be provided with post procedure instructions on the day of your procedure. Your doctor and nursing staff will explain all care instructions to you along and answer any questions you may have.

Making an appointment

Patients are advised to phone our practice on (08) 9284 2900 to book a consultation with Dr Sanjay Nadkarni. More information is available on our website www.endovascularwa.com.au