Varicose veins behind the knee and recurrent varicose veins will also require duplex scanning.

Treatments available:

• **Operation** (see Varicose Veins - The Operation information)

• **Endovenous Laser Therapy** (see Varicose Veins - Endovenous Laser Ablation Therapy information)

• **Foam Sclerotherapy** (see Varicose Veins - Sclerotherapy or Injection Treatment information)

• **Radiofrequency ablation**

All of the above will require duplex scanning as part of their selection process and the monitoring of the treatment itself.

Very occasionally, if the scan is not clear, an X-ray of the veins, called a venogram, may be required. This involves the injection of dye (contrast) into a vein in the foot. The contrast can be seen outlining the veins in the calf and thigh, and is the best way of detecting previous damage to the deep veins.

Other scans which are sometimes used include MRI and CT.

**Is treatment successful?**

Stockings are effective in controlling symptoms and preventing skin complications. They are only effective if worn regularly, but can reliably avoid the need for surgery in the majority of patients.

Injection of varicose veins can be successful, but the long term outcome of the new treatment of foam sclerotherapy requires further evaluation.

Surgery is followed by a recurrence rate (varicose veins returning) of about 1 in 7 over a ten year period. This recurrence may be due to poorly planned or performed surgery, new vein formation, or due to new valve leaks beginning elsewhere.

There is a small risk of deep vein thrombosis (DVT) after surgery which can be reduced by wearing compression stockings and remaining mobile after the operation.

**Can I help myself?**

Simple measures such as wearing support stockings will control the symptoms for many people. Stockings may help to prevent progression or enlargement of varicose vein.

If you are overweight you should try and lose weight.
What are varicose veins?

Varicose veins are veins under the skin of the legs, which have become widened, bulging, and twisted. They are very common and do not cause medical problems in most people.

There are two main systems of veins in the legs:

Deep veins. The leg muscles squeeze the deep veins during walking, carrying most of the blood back up the legs to the heart.

Superficial veins occur under the skin which are less important and can form varicose veins.

All of these veins contain one-way valves to ensure that the blood flows towards the heart.

Failure of these valves allows blood to flow backwards down the veins and results in an overload of pressure when standing. This excess pressure leads to widening of the veins so that they do not close properly. Blood then flows back into the leg along these veins and causes varicose veins.

Raised pressure in these veins also encourages the development of spider veins and discoloured areas which look like bruises.

What causes varicose veins?

Varicose veins and spider veins often run in families and there may be a hereditary component.

Women are more likely to suffer from varicose veins and up to 50% of women may be affected.

Hormonal factors including puberty, pregnancy, menopause, the use of birth control pills, and HRT affect the disease.