Varicose veins are abnormal dilated veins. There are two systems of veins in the leg. One is a superficial system which runs just under the surface of the skin. The second system is called the deep venous system. These veins are deeper in the tissues and muscles of the leg and are not visible to the naked eye.

Varicose veins occur in the superficial system.

**What causes varicose veins?**
It is thought that varicose veins occur because of a weakness in the valves and walls of the veins. The tendency to develop varicose veins often runs in families. Common symptoms include itching, aching, inflammation (phlebitis), bleeding and poor cosmetic appearance. Symptoms are often made worse by prolonged standing and during pregnancy, although they usually improve following delivery.

**Are varicose veins anything to worry about?**
No. Varicose veins are generally harmless and DO NOT increase the risk of Deep Vein Thrombosis (blood clots in the leg).

Rarely, varicose veins may cause chronic swelling and discolouration around the ankle. In some cases, this can lead to leg ulcers later in life.

**Do varicose veins require treatment?**
Varicose veins do not require treatment unless they cause significant symptoms.

**What tests will I undergo for my varicose veins?**
In order to plan the correct management of your varicose veins we need to identify as accurately as possible the sites at which the veins/valves are faulty. We pay particular attention to the major points where the superficial (skin) veins join the deep veins at the groins and behind the knee.
This will take place within the outpatients clinic using Doppler or ultrasound scan.
What treatments are available for varicose veins?
There are several different treatments, depending on which is most suitable for you following diagnosis. These include:

- Compression stockings
- Injection therapy (not commonly available on the NHS)
- Endovenous laser therapy (EVLT)
- Radiofrequency
- Surgery

Surgery for varicose veins
Your consultant has advised you that surgery is the best treatment option for your varicose veins.

The operation is normally carried out as a day-case procedure and only one leg is operated on at a time.

The surgery may be carried out under general anaesthetic or sometimes a spinal/epidural anaesthetic into the back.

The operation will normally consist of a small cut of 1-2 inches either in the groin or behind the knee to tie off the leaking vein. A number of smaller, minute incisions are made over the varicose veins to remove them. These are called avulsions. The skin is closed using a dissolvable suture or sticky paper strips.

What can I expect after surgery?
After the surgery a tight bandage will be applied to reduce bruising and to stop any leakage of blood from the smaller incisions.

This will be removed by your practice nurse a week later and replaced with a light compression stocking which should be worn for another two weeks.

Your leg will be bruised. This can be quite extensive and can take several weeks to subside.

You should walk as much as you are able and for best results you should elevate your legs whenever you are not walking.

Standing still in one position is not recommended and you should move from one foot to the other if you are standing still. When resting with your legs elevated it is a good idea to move your feet and ankles around using circular movements. This allows the blood to be pumped back up the legs using the calf muscle, keeping the blood moving in the right direction.
What about driving and going back to work?
You should not drive for at least 2 weeks after your surgery. Please check your insurance as you may have to inform them if you have had surgery. Depending on your type of work you will be off for at least 2 weeks after your surgery.

What are the possible complications of varicose veins surgery?
• Bleeding – either at the site of the larger incision or more often from the small incisions. This normally settles with elevation (raising the leg) and applying pressure to the bleeding point.
• Wound infection – 10-20% of patients develop an infection, usually in the groin, and may require antibiotic therapy.
• Numbness or tingling - caused when small skin veins are removed, as small nerves often run along the side of the veins and can be damaged when the vein is removed. This is normally a temporary problem that resolves with time.
• Major nerve damage – affects 1-5% of patients. This is more common with surgery to ‘re-do’ the veins. If your surgery is behind the knee there is a particular risk. If major nerve damage occurs you may develop foot drop.
• Chronic pain – occasionally some patients suffer with long-term pain in the leg following removal of the varicose veins. This can be problematic and very difficult to treat effectively.
• Thread veins – occasionally, following removal of the varicose veins, you will see an increase in thread veins (spider veins).
• Deep vein thrombosis – affects 0.5% of patients. Although varicose veins do not increase your risk of DVT, having the surgery does increase your risk for a few months afterwards. Precautions will be taken at the time of surgery to reduce the risk as much as possible.
• Pulmonary Embolus – A blood clot can travel from the leg to the lungs. This can be life-threatening. It is rare but is a possible complication of surgery.
• Scars – you will have scars in the groin or behind the knee and over the area where the varicose veins were removed. There may be a lot of these on the leg. They will fade but can take up to a year to become less obvious.
• Recurrence – 10-20% of patients will have their varicose veins replaced by others as there is a network of veins under the skin. If other valves fail then it is possible to develop more varicose veins. This is more likely to occur in ‘re-do’ surgery.
• Risks associated with general anaesthesia (i.e. where the patient is ‘put to sleep’ for surgery)

Any personal pre-existing conditions may further increase the risk of surgery, these will be discussed with you at the time your consent is taken to proceed with surgery. Please ask any questions or discuss any concerns at this time.

**Patient Advice & Liaison Service (PALS)**
PALS staff are available to offer advice or information on healthcare matters. The office is in the Main Foyer (Gate 4) of Doncaster Royal Infirmary. Contact can be made either in person, by telephone or email. PALS staff can also visit inpatients on all Trust sites.

The contact details are:
Telephone: 01302 553140 or 0800 028 8059
Email: pals.dbh@dbh.nhs.uk