As with any invasive procedure, we will monitor you very closely. You may need painkillers and, or sedatives and oxygen.

**How long will it take?**
This can vary for a number of reasons however you can expect to be in the x-ray department for 2 to 3 hours.

**What happens afterwards?**
The nursing staff will monitor you in the x-ray department before returning to your ward.

**Are there any risks?**
As with any procedure where the skin is penetrated there is a risk of infection.

There is a very slight risk of an allergic reaction to the contrast and kidney function may be affected.

Any procedure that involves placing a catheter inside a blood vessel carries certain risks which include; damage to the blood vessel; bruising or bleeding and potential laceration (a cut) of the hepatic artery. This may result in severe liver injury or bleeding that could require a blood transfusion or urgent surgical intervention.

Death is a rare complication.

You may need frequent examinations and x-ray images if your consultant feels there is a problem with the stent graft.

**If you have any questions please telephone the number on your appointment card or letter.**
What is a TIPS (Transjugular Intrahepatic Portosystemic Shunt)?

We use a TIPS to treat the complications of portal hypertension, which is increased blood pressure in the portal vein, which supplies the liver. This reduces the normal blood flow through the liver or it maybe blocked due to scarring or other damage. This pressure causes blood to flow backward from the liver into the veins of the spleen, stomach, lower oesophagus, and intestines, causing enlarged vessels, bleeding and the accumulation (build up) of fluid in the chest or abdomen.

We place a stent (small tube) into the veins in the middle of the liver to allow blood flow to bypass the liver.

Who will do it?

A specially trained doctor called a Radiologist.

Where will it be done?

In the x-ray department, usually in a screening room, it is similar to an operating theatre.

When can I discuss the procedure?

You can discuss the procedure with your referring consultant, and also the Radiologist before the procedure.

Consent

We will ask you to sign a consent form before the procedure. Please make sure that you ask any questions you may have. When signing the form you should know what we plan to do, alternative treatments, and any risks or complication of the procedure.

What preparation is required before the procedure?

Preparation can vary from patient to patient. The preparation will include some or all of the following:

- Blood tests
- Full medical history taken
- X-rays or scans
- You cannot eat for 6 hours before the procedure
- You may drink very small sips of clear fluid up to 4 hours before the procedure
- A flexible tube being inserted into a vein (peripheral cannula)

You will need to undress and wear a hospital gown.

What happens during the procedure?

This is a sterile procedure performed under local anaesthetic and sedation and occasionally under general anaesthesia.

Routinely, we obtain access to the blood system via the neck vein. The Radiologist will inject x-ray dye (contrast), as the contrast passes round your body you may feel a warm sensation which some people find a little unpleasant. This soon passes.

We insert the guide wires and catheters to the spot where the stent will be inserted.

The Radiologist will use the x-ray equipment to guide the stent graft after creating a tunnel within your liver to redirect the blood flow.

We monitor the pressure in the hepatic vein and right side of the heart.

Using x-ray guidance, the Radiologist place a stent from the portal vein into the hepatic vein. Once the stent is in the correct position, the radiologist inflates the balloon, expanding the stent into place.

The Radiologist deflates the balloon and removes it along with the catheter. They measure the pressures inside the vein to confirm a reduction in portal blood pressure.