Information for patients

Mesenteric Angiography

Sheffield Vascular Institute

Northern General Hospital
You have been given this leaflet because you need a procedure known as a **Mesenteric Angiogram**. This leaflet explains more about Mesenteric Angiograms and answers some of the most frequently asked questions. If, after reading this leaflet, you have any questions or concerns, you should write them down and discuss them at your next appointment with your consultant, or the radiologist. It is important that you understand the procedure, along with the potential benefits and risks before you agree to it.

Sometimes the procedure is performed urgently, but you should still be aware of all the information and have the opportunity to ask questions, before you decide to go ahead.

**Where will my hospital appointments take place?**

If you are an outpatient, you will probably be seen by a doctor from the Sheffield Vascular Institute, based at the **Northern General Hospital**, to discuss the procedure beforehand.

The Sheffield Vascular Institute is one of the largest vascular centres in Europe. We specialise in the treatment of all circulatory conditions affecting the arteries, veins and lymphatics. If you wish to find out more about the Sheffield Vascular Institute then look under the Guide to Services of the Sheffield Teaching Hospitals NHS Foundation Trust website. ( [http://www.sth.nhs.uk](http://www.sth.nhs.uk) )
What is a mesenteric angiogram?

A mesenteric angiogram is a special x-ray examination of blood vessels supplying your stomach, bowel, liver, spleen and pancreas. Normally, blood vessels do not show up on ordinary x-rays. However, by injecting a special dye called contrast medium, into the artery we can produce X-rays of the arteries and veins in this area, which will help the doctor to diagnose your problem.

Why do I need a mesenteric angiogram?

Mesenteric angiograms are usually performed to investigate and possibly treat two different types of clinical problems.

The first and most common reason is to try and identify a site of internal bleeding into the bowels. This procedure is usually performed urgently, and if a bleeding point is found, it may be possible to treat this during the procedure, by blocking up (or embolising) the blood vessel(s) responsible.

The second reason is to look for other abnormalities of the blood vessels supplying the bowels. These include narrowings or blockages, which may limit the blood supply to the bowels and cause symptoms of pain and weight loss. Again, treatment may be considered at the same time if an abnormality is found.

The decision to perform a mesenteric angiogram is usually made between your doctor and a specialist x-ray doctor (a radiologist) who performs the angiogram. Your doctor should discuss the reasons why you need to have the angiogram and together you can decide whether to go ahead with the procedure.
What happens before the procedure?

Most patients have a type of scan before a mesenteric angiogram.

- To investigate major bowel bleeding - this may be a CT (Computed Tomography) scan performed whilst you are an inpatient.
- To investigate poor bowel blood supply - this may be a CT or an MRI (Magnetic Resonance Imaging) scan, although ultrasound scanning is sometimes also used.

If you have any allergies, you must let your doctor know. If you have previously had a reaction to x-ray dye (contrast medium), you must also tell your doctor about this.

We must seek your consent for any procedure or treatment beforehand. Staff will explain the risks, benefits and alternatives where relevant before they ask for your consent. If you are unsure about any aspect of the procedure or treatment proposed, please do not hesitate to ask for more information.

How is it done?

The procedure is performed by the radiologist, in the X-ray department. You will be in an x-ray room, usually lying on your back on the x-ray table. You will have a monitoring device attached to your chest and finger, and may be given oxygen to breathe. The angiogram is usually performed via an artery at the top of your leg, in the groin. The skin of the groin will be cleaned with antiseptic, and then most of the rest of your body will be covered with a theatre towel. The skin and deeper tissues over the artery will be numbed with local anaesthetic.
The radiologist inserts a needle and then a fine plastic tube, or catheter, into the artery. This tube is guided into the right position with x-ray equipment. The radiologist will inject x-ray dye (contrast medium) through the catheter and x-rays are taken. As the contrast medium is injected through the catheter and it passes around your body, you may get a warm feeling, which some people find a little unpleasant. However, this soon passes off.

When the angiogram is completed, the catheter will be removed and the radiologist will then press firmly for several minutes, to prevent any bleeding.

Will it hurt?

The local anaesthetic often stings to start with, but this soon wears off, and the skin and deeper tissues should then feel numb. After this, the procedure should not be painful.

What happens next?

If the test is being done to look for internal bleeding, and a bleeding site is found, the radiologist may go on to treat it. This procedure is called mesenteric embolisation. The tip of the catheter is placed as close to the bleeding artery as possible, and the artery is blocked. A variety of materials can be injected through the catheter to block the bleeding artery. Sometimes, small pieces of metal wire (coils) are used.

If the angiogram is being performed to investigate possible poor blood supply to the bowels, and narrowing or blockages are found in the blood vessels, the doctor may
go on to treat these areas, usually by inserting a stent (a small cylindrical metal cage) to hold open the artery.

**How long will it take?**

Every patient's situation is different, and it is not always easy to predict how complex or how straightforward the procedure will be. As a guide, you can expect to be in the x-ray department for about an hour and a half altogether.

If treatment takes place, it may require at least an additional half an hour.

**What happens afterwards?**

You will be taken back to your ward. Nurses on the ward will carry out routine measurements, such as taking your pulse and blood pressure, and check the skin entry point in the groin for any bleeding or bruising. You will generally stay in bed for a few hours after the procedure, until you have recovered.

**Are there any risks or complications?**

Angiography is a very safe procedure, but there are some risks and complications that can arise. The most likely complication is the development of some bruising or a small lump in the groin where the catheter was inserted. This occurs in about 1 in 10 (10%) of patients, is usually mild, and should settle within a few weeks. Very rarely, some damage can be caused to the artery by the catheter, and this may need to be treated by surgery or another radiological procedure.
If embolisation is performed, there is a small (less than 1 in 20 - 5%) risk of the bowel becoming too short of blood. If this occurs, you will require bowel surgery.

If stenting is performed, there is a small risk (approximately 5%) the blood supply can not be improved, and an even smaller risk that it can become worse rather than better. If this occurs, you may require bowel surgery.

Despite these possible complications, the procedure is normally very safe, and is carried out with no significant side effects at all in the vast majority of the patients.

**Is there any activity I should avoid doing?**

Following an angiogram, you should avoid strenuous activity for 48 hours, with a gradual return to normal activities after a week or so. You should avoid driving for 1 week, and avoid bathing until the groin wound has healed.

**Will I need to come back to hospital for a check up?**

You may need to come back for a follow up after discharge from hospital, depending on which procedure you have undergone.
What if I think there is something wrong when I get home?

If you think there is something wrong when you get home, you should contact the ward from which you were discharged or the angiography suite. However, should you have real concerns about your condition, then you should dial 999.

Firth 2 (0114) 2714602 / 2714685

Vascular Radiology Secretary (0114) 2269084

Vascular angio dayward (0114) 2716972

If you notice any bleeding, severe abdominal pain or cramps or develop a lump in the groin once you get home, you should seek urgent medical advice.