

Information for Patients Undergoing Angioplasty and/or Stenting in Interventional Radiology

Angioplasty and stenting is a minimally invasive procedures done by specialist doctors called Interventional Radiologists. This leaflet is designed to help you understand about the procedure and what to expect on the day of your procedure. The radiology team includes specialist radiographers and nurses and your Consultant Interventional Radiologist will be at hand to answer any questions and address your concerns before the procedure on the day of your admission.

Who are the team that will be looking after you?

Interventional Radiologists are doctors who specialize in using x-rays and other imaging modalities to diagnose and treat diseases. They have a unique blend of skills and expertise enabling them to treat many diseases, which once required open surgery.

There is a small team of dedicated staff to look after you on the day of your procedure. This will include Radiographers, Nurses and Students.

What is angioplasty?

An angioplasty is a way of relieving a blockage in an artery, without having an operation. A fine plastic tube, called a catheter, is inserted into the artery and through the blockage, a special balloon on the catheter is then inflated to open up the blockage and allow more blood to flow through it.

What is stenting?

Stenting is sometimes done when angioplasty has failed to open your artery. This procedure involves inserting a metal alloy mesh called a stent across the diseased segment.

A decision is usually made during the procedure and after discussion with you and the surgeons.

Post procedure you may be required to have follow up ultrasound scans to assess how well your stents are working.

What are the benefits of angioplasty and/or stenting?

- The intended benefit is to improve the blood supply to an area affected by the narrowing or blockage of a blood vessel.
- Avoid surgical interventions such as bypass surgery. Balloon angioplasty and stent placement are much less invasive and relatively low-risk and low-cost procedures.
- Most procedures are usually performed as a day case procedure using **local anaesthesia** (numbing your skin). Hence your recovery time and hospital stay are reduced. Very rarely you will need to be sent to sleep i.e. require general anaesthesia. This will be discussed with your surgeon if needed.
- No surgical incision is needed – only a small nick in the skin that does not have to be stitched.
- You will be given the appropriate advice when leaving the department post procedure.

What are the risks and complications associated with angioplasty and or stenting?

- Minor complications are mainly at the skin-nick (access-site). These include:
 - ★ Discomfort or low-grade pain.
 - ★ A small bruise (haematoma), which can occur often and will resolve by itself over several days.
 - ★ Infection at the site is very rare.
- Major complications are uncommon. These include:
 - ★ Active bleeding at the skin incision site, which may require treatment by the doctor having to apply firm pressure to the site for several minutes. Very rarely, you may need blood transfusion and/or surgery for the bleeding.
 - ★ Very rarely you can experience life threatening bleeding from the artery puncture site we have accessed to perform your procedure. This is the main reason, we ask an adult to stay with you overnight. They will need to dial 999 and help you press on the puncture site until the ambulance arrives.
 - ★ Large tears in your artery that may need emergency stenting or surgery.
 - ★ During the procedure, a blood clot or fragments from the vessel wall can dislodge and block the artery. This is called embolism in medical terms. If the blockage is significant, this may need treating with medication that is injected into the artery to dissolve the clot or may require emergency surgery.
- Allergic reactions to the x-ray dye are in-frequent. However, our staff are trained to deal with these reactions and treat appropriately.
- For some patients the x-ray dye can have a detrimental effect on your kidney function, and this is why we check your renal/kidney function with a blood test prior to the procedure being performed.
- Sometimes it is not possible to cross the blockage, in which case the procedure will have to be abandoned.
- Arteries treated with angioplasty or stenting can become narrowed again. This is called re-stenosis. This can happen in varying time frames and may require further treatment.
- There have been very rare instances of stent migrating and/or fracturing. If this happens you may need open surgery such as a surgical bypass.

What are the limitations of angioplasty and stenting?

Angioplasty and stenting are just two of the ways to treat narrowed or blocked arteries. Regardless of which artery is blocked, angioplasty and stenting does not reverse or cure the underlying disease. The same artery may become blocked again, a condition called re-stenosis. Medications and exercise are often the first step in treating arterial disease.

How should you prepare for the day?

- You will need to arrange for someone to take you home by car or taxi and to stay with you overnight.
- You may have an early, light breakfast (for example, a hot drink and a slice of toast) on the morning of your procedure.
- Please have a shower or bath before you attend the department.
- You will have been assessed by a nurse on an earlier date. At the time, you will be made aware of any of your medications that need to be stopped before the procedure. Of particular importance are blood thinners like warfarin, please ensure you bring your list of medications with you. You should also ensure that you take **all** your usual medication as normal.

Please note: If you take any of the blood thinning medication set out in the table below, this **WILL NEED TO BE STOPPED the appropriate number of days before the procedure.** (This is stated in the table next to the name of the medication). Failure to stop the medication may result in your procedure being cancelled.

Medication	Duration that the medication should be stopped prior to procedure
Dipyridamole	1 day
Rivaroxaban	1 day
Apixaban	2 days
Dabigatran	3 days
Edoxaban	3 days

- Make sure you bring an overnight bag, just in case for transfer to Bradford, which will have been mentioned at your pre assessment.

If you are a diabetic on metformin or insulin, please let the staff looking after you on the day know.

What happens on the day of the procedure?

Check-in: When you arrive in the department, you will be checked into the day case unit by a radiology nurse and given a hospital gown to wear. You will have a cannula inserted in your arm, so that we can give you medications if you need them. You may also need to have a blood test taken on the day of your procedure.

Consent: Your doctor (Interventional Radiologist) will discuss with you the procedure in brief, the expected benefits and the possible risks. You will need to sign and date a consent form, if you agree to go ahead with the procedure. The decision is solely yours and you can change your mind at any point of time. Please let the doctor and staff know, if this were to be the case. You should not feel pressurised to make a decision.

Procedure: For the procedure, you will be taken into the interventional suite, where you will be asked to lie on a narrow table. Monitoring equipment will be attached to you, to measure your oxygen levels, heart rate and blood pressure. The access area will be cleaned by the nurse using a cold antiseptic solution. After that a sterile drape will be placed over most of your body. You will be awake and will be able to talk during the procedure. The doctor will inject local anesthesia at the access-points. A short tube, called a sheath, is placed into your artery. The sheath helps the doctor to insert thin flexible tubes and wires into your arteries without having to repeatedly puncture the artery. X-ray dye will be injected into your arteries to map your arteries before and after treatment. You may be required to hold your breath for a few seconds and lie very still during dye injection. Please be aware that the table and the x-ray camera move during the procedure. After the procedure, the hole in your artery will be closed either by manual compression or using a closure device. This is at the discretion of your doctor.

Post-procedure: You will be taken back to the day case unit, where you will have to lie flat on the bed for a period of time. If you are recovering as expected you will be able to sit up in the bed and gradually onto a chair before you are discharged. The amount of time you spend with us post procedure depends on several factors in regard to what procedure you have undergone. The nursing team will inform you of how long this is likely to be before you can go home.

After-care: Specific instructions will be given to you at the time of discharge. **Below are some details it is important to know before you come into Radiology for your procedure: -**

- You should rest for the remainder of the day and the next, depending upon how you feel.
- Have someone stay with you overnight.
- You can have a shower or bath 24 hours after the procedure.
- Do not lift heavy weights or engage in any strenuous physical activity for 48 hours following the procedure.
- You can drive after 48 hours if you feel well, but you may want to inform the insurance company that you had a procedure done.
- We recommend you do not undertake any long journeys or long flights for at least a one week after the procedure.
- If you cough, sneeze, laugh or bear down when going to the bathroom, please apply pressure to the groin area. The nursing team will show you how prior to discharge.

Please Note: Radiology cannot be held accountable for any personal belongings you bring into the department with you.

All patients attending the x-ray department will be asked to confirm their identity by stating their full name, address and date of birth. This is a **legal requirement** and may be carried out several times during your visit.

If you have any comments about this leaflet or the service you have received you can contact :

Radiology Admin Support
01484 355591

Radiology Daycase
01484 355781

Huddersfield Royal Infirmary
Lindley
Huddersfield
HD3 3EA

www.cht.nhs.uk

If you would like this information in another format or language contact the above.

Potřebujete-li tyto informace v jiném formátu nebo jazyce, obraťte se prosím na výše uvedené oddělení

Jeżeli są Państwo zainteresowani otrzymaniem tych informacji w innym formacie lub wersji językowej, prosimy skontaktować się z nami, korzystając z ww. danych kontaktowych

ਬ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਵੇਰ ਪ੍ਰਾਚੁਪ ਜਾਂ ਭਾਸ਼ਾ ਵਿੱਚ ਲੈਣਾ ਚਾਹੁੰਦੇ ਹੋ,
ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਉਪਰੋਕਤ ਵਿਭਾਗ ਵਿੱਚ ਸਾਡੇ ਨਾਲ ਸੰਪਰਕ ਕਰੋ।

اگر آپ کو یہ معلومات کسی اور فارمیٹ یا زبان میں درکار ہوں، تو
برائے مہربانی مندرجہ بالا شعبے میں ہم سے رابطہ کریں۔

"إذا احتجت الحصول على هذه المعلومة بشكل مغاير أو مترجمة إلى لغة مختلفة فيرجى منك الاتصال بالقسم
المذكور أعلاه"

This leaflet has been prepared by the British Society of Interventional Radiology (BSIR) with the Clinical Radiology Patients' Liaison Group (CRPLG) of The Royal College of Radiologists and edited accordingly by Calderdale & Huddersfield Trust

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Leaflet No: dtra0104 v2 review date 10/25 page 5 of 5

