

PATIENT INFORMATION

Have you been referred to Interventional Radiology? – Essential Facts



What is Interventional Radiology (IR)

Interventional Radiology (IR) offers minimally invasive procedures as an alternative to traditional open surgery for a multitude of conditions.

Vascular and non-vascular radiology is an established and expanding field. Many patients attend for day-case procedures, but a significant number are inpatients.

IR uses x-rays, ultrasound or CT to look inside you whilst operating through tiny holes in the skin, manipulating wires & tubes to get to wherever we need to target treatment.

IR is sometimes referred to as “Minimally Invasive Image Guided Surgery”.

What procedures do we do

Within IR there are many new and innovative procedures developing all the time. The most common include vascular procedures such as angiogram, angioplasty and stenting, fitulagram, fistulaplasty and stenting/salvage, endovascular aneurysm repair (EVAR), IVC filter insertion and removal, vascular access and embolisations. Some non-vascular IR procedures include nephrostomy insertions, ureteric stenting, percutaneous transhepatic cholangiogram and gastrostomy insertion.

Interventional oncology procedures are often performed in IR such as trans-arterial chemo embolisation and selective internal radiation therapy. Some biopsies and drainages are also performed in the IR department.

How will the procedure rooms look and what equipment will you see

All interventional suites can look slightly different across different hospitals however most have similar features.

They usually have a large ceiling or floor mounted camera which moves around in different directions over a table/bed where you will be positioned for your procedure. There will be a control room/viewing area with a window into the procedure room for staff to access computers and set up for your procedures on the IT systems. The rooms will be fitted with cupboards for medications and equipment required. A scrub sink area or room will be available for the operator and assisting scrub nurse to wash their hands, glove and gown up for the procedure to ensure everything is clean and sterile for your procedure.

What happens on the day Check in

You will be greeted in the IR department by a nurse who will check your identity and will go through a checklist of questions with you prior to the procedure to ensure you are suitably prepared and the procedure is safe to go ahead.

The operator (usually radiologist) will then come out to chat to you to introduce themselves, answer any questions you may have and confirm your consent. Once you are ready you will be transported to the procedure room, introduced to the rest of the team and positioned for your procedure. The team will explain to you what they are doing and what is going on around you.

Will you be sedated

The vast majority of IR procedures can be performed under local anaesthetic with you being fully awake. Some longer procedures require the use of sedatives or “gas & air” to ensure that you remain comfortable. Occasionally, complex or lengthy procedures require a general anaesthetic.

Procedure

The nurse looking after you will attach you to the monitor to keep a check on your observations such as blood pressure, heart rate, oxygen levels, respiration levels and often ECG tracing. This will likely remain in place for the duration of the procedure. They will also be responsible for documenting your care throughout the procedure.

As your procedure is likely to be under fluoroscopic x-ray guidance all staff members will be required to wear protective lead garments such as an apron/skirt and vest, a thyroid collar and lead glasses.

The radiographer will confirm your details again against your procedure request and position the camera for your procedure and controlling it throughout your procedure.

You will be cleaned and a sterile drape will be placed over you appropriately. As this is sterile you must not touch this area or the drapes to prevent any chances of infection. There will be a scrub nurse (wearing a sterile gown and gloves) and circulating nurse preparing and assisting the operator with the equipment required for your procedure.

Your procedure will commence and the team will keep you informed throughout. You may be asked to do some different breathing exercises such as breathing in, then out and then holding your breath as the procedure progresses in order for the operator to acquire the highest quality images required. Following the procedure you will be transferred to a trolley and transferred to a recovery area for handover or recovery within the department.

Handover

A qualified nurse will be responsible for your care immediately after your procedure and will be given a handover by the nurse looking after you during your procedure. This will detail any relevant information about you, what happened through the procedure, what you have had done and after procedure requirements.

Aftercare

You will likely be on a period of bed rest following your procedure. This may be up to 6 hours depending on the procedure.

You will be informed if any sutures or dressings have been used or applied following the procedure and instructions will be given for this.

Instructions and information about what you can and can't do following your procedure will be given to you either within IR or on a ward.

Who may you see Nurses

You will have a primary nurse looking after you and your needs prior to, during and after the procedure, they will alert the operator if there are any changes or concerns throughout. The primary nurse will also be responsible for administering sedation if required under the instruction of the operator. Normally there will also be a scrub nurse (in some cases operating department practitioner- ODP) assisting with the sterile equipment and a circulating nurse or healthcare assistant opening the sterile equipment. They will also be responsible for documenting what has been used throughout the procedure.

Radiographers

You will have at least 1 Radiographer with you during your procedure. The Radiographers are responsible for the x-ray equipment, Radiation safety for you and all of the staff in the room and may move the table and x-ray tube around you to get the best images to assist with your procedure. If any additional equipment is needed for your case this may be operated by the Radiographer too.

Interventional Radiologist

Interventional radiologists (IR) have special expertise in reading the images and using imaging to guide catheters and wires to aid diagnosis and treatment. They are doctors who are trained in radiology and interventional therapy. You will meet the IR doctor either in clinic beforehand, on the ward or when you are admitted for your procedure.