

Patient Awareness

Interventional Radiology: your minimally invasive alternative

Over the last twenty years, interventional radiology has gained momentum offering an invaluable alternative to open surgery.

In the majority of cases, it allows for shorter hospital stays, general anaesthesia is not usually required and the risk, pain and recovery times are reduced compared to conventional surgery.

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Cardiovascular and Interventional Radiological Society of Europe

What is Interventional Radiology?

Interventional radiology is a branch of radiology, specialising in the diagnosis and treatment of a wide spectrum of conditions by performing minimally invasive therapeutic procedures.

The following imaging techniques guide these procedures:

- X-ray
- ultrasound
- magnetic resonance (MR)
- computed tomography (CT)

Catheters with guide wires, usually only 1-2 millimetres in diameter, are guided through blood vessels or other organ pathways to treat at the site of disease.

The body parts and systems that can be treated using interventional radiology techniques are:

- abdomen (intestine, kidneys, liver, stomach)
- central nervous system (brain, spine)
- chest (lungs, pleurae)
- heart & vascular (arteries, veins, haemodialysis access)
- musculoskeletal (bones, joints, spine)
- genitourinary (uterus, testes, kidneys)
- other organs and soft tissues

Interventional radiologists have pioneered these high quality procedures and standards for performing minimally invasive medicine with a concentration on patient safety.

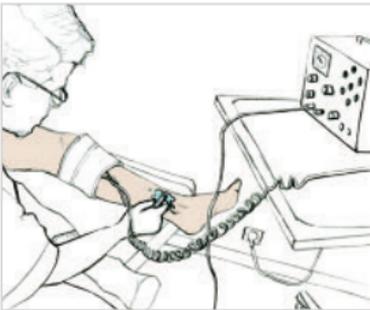
Interventional radiologists are doctors specialising in radiology. They have completed further education and expert training in diagnostic radiology and interventional radiology including radiation safety, radiation physics, the biological effects of radiation, injury prevention and clinical practice; allowing for patient consultations as a result of direct referral.

My Interventional Radiology Journey: From First Consultation to Treatment

30 days before procedure

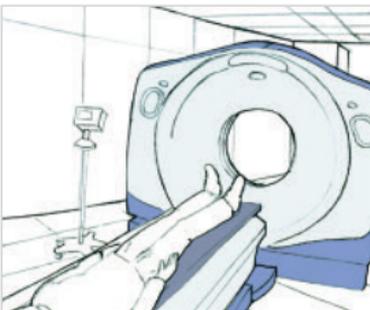


I consult a radiologist who examines my files and informs me of the interventional treatments which may be suitable.



During this consultation, the radiologist carries out a clinical examination.

10 days before procedure



I undergo further scans or imaging tests (X-ray, MRI or ultrasound) in order to locate my lesion and determine whether an interventional procedure would be appropriate in my case.



During this examination, the radiologist is assisted by a radiology technician.

30 minutes before procedure



In the preparation room, I am welcomed by a nurse who checks my files, my blood pressure and other vital signs.

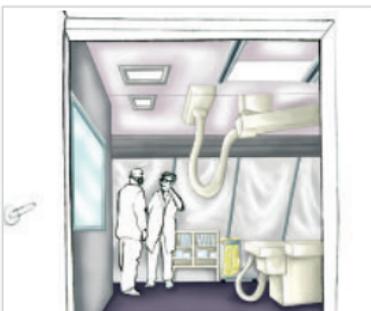


I leave the preparation room and am transported by an attendant to the examination room.

10 minutes before procedure



On my way to the examination room



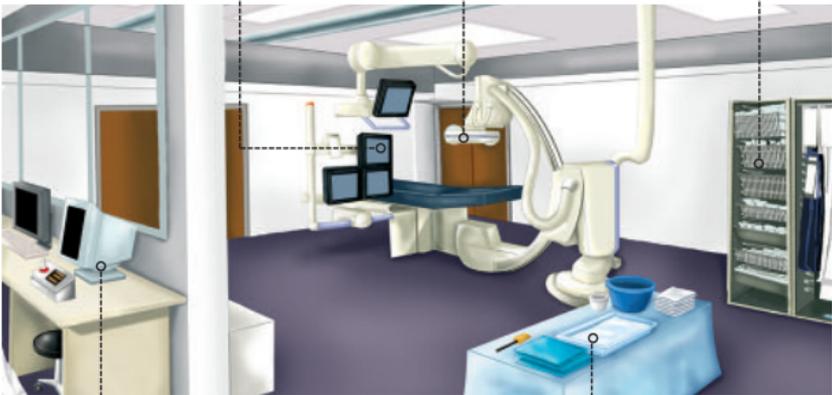
Through the entrance of the examination room, I can see the interventional radiologist and a technician as well as part of the equipment which will be used to guide my treatment.

The examination room and procedure

Next to me, there are several screens which show the interventional radiologist images of my lesion during the course of the procedure as well as my vital signs.

Above me, I can see the radiology equipment that transmits images of my body as well as the site and condition of my lesion on the screens.

On the other side, I can see the cupboard that contains equipment and apparatus to be used during the procedure, for example guide wires balloons and stents.



In the control room, I can see nurses and technicians who run the radiology equipment and analyse the images under the supervision of the interventional radiologist.



The interventional radiologist as well as some of the nurses and technicians remain by my side throughout the whole procedure.

30 minutes after procedure

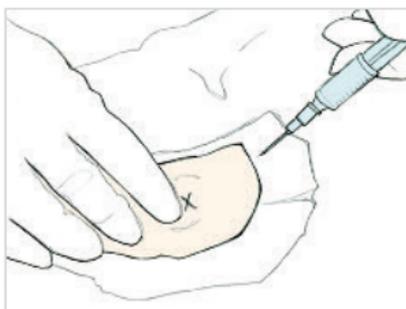


After the intervention, I am taken to the recovery room where the puncture site is compressed to stop the bleeding.

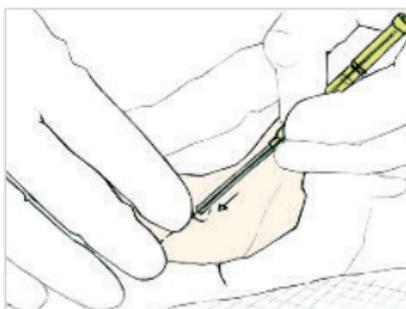


Compression bandages are then applied and I can return to my hospital room for one or two nights.

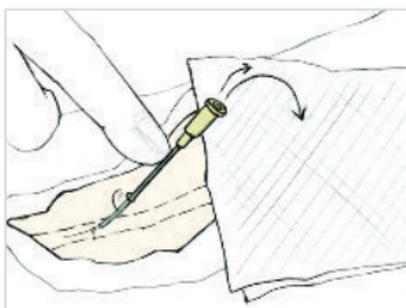
How is an arterial catheter introduced at the beginning of a procedure?



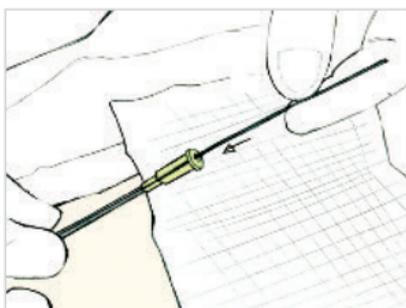
The interventional radiologist injects local anaesthetic in the area to be punctured.



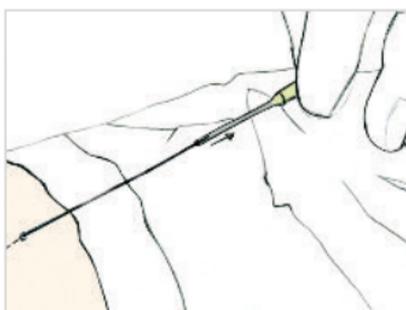
The interventional radiologist performs the puncture.



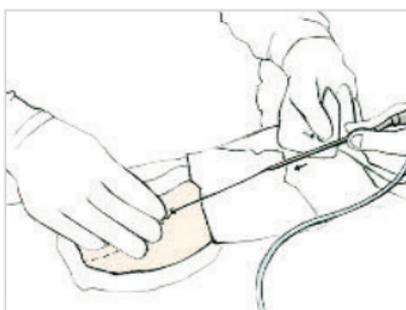
With the needle removed, a short plastic tube remains in place through which some blood can flow.



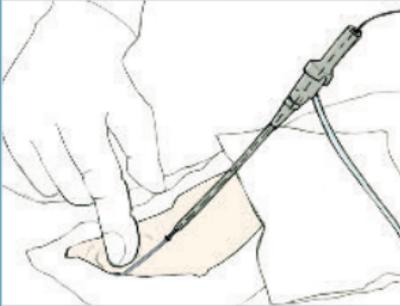
The guide wire is then introduced.



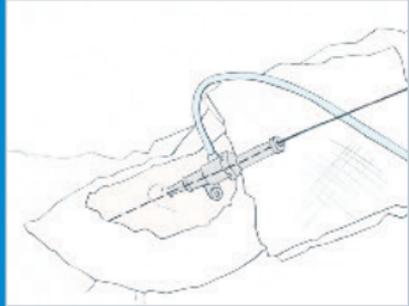
The plastic tube is removed, only the guide wire remains in place.



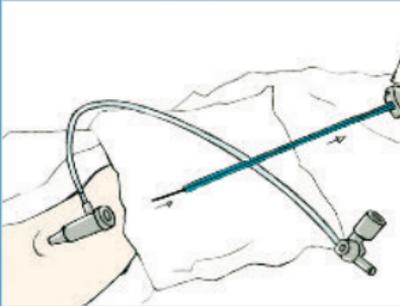
The sheath slides over the guide wire which will allow for the delivery of medication or material.



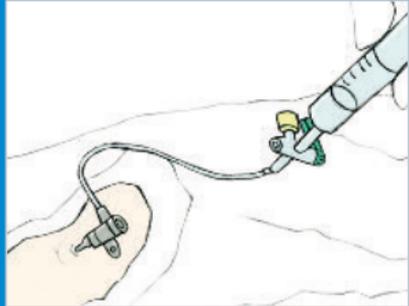
The sheath is gradually inserted into the skin.



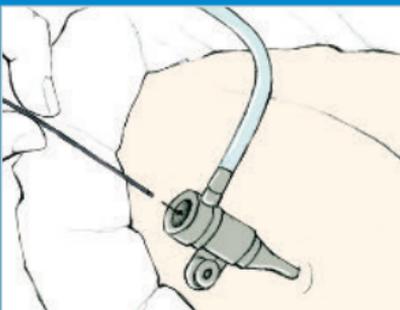
The sheath is now in place and the guide wire protrudes from the sheath.



The dilator and the guide wire are removed simultaneously.



The sheath is then flushed by injecting saline water.



The intervention itself can now begin: the guide wire and catheter are inserted and guided up to the lesion, e.g. plaque or fibroid.

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