

Division of Imaging

Information for Patients

Inferior Vena Cava Filter Placement

This leaflet tells you about having an inferior vena cava (IVC) filter inserted. It explains what is involved and what the possible risks are. It is not meant to replace informed discussion between you and your doctor but can act as a starting point for such discussions. If you have any questions about the procedure, please ask the doctor who has referred you or the department which is going to perform it.

What is an IVC Filter?

An IVC filter is a small metal device usually placed in a large vein called the inferior vena cava (IVC) that drains blood from the legs and lower part of the abdomen. The IVC filter allows blood to flow through normally but traps any large blood clots, stopping them from getting to your lungs.

What is it used for?

Blood clots (thrombosis) sometimes form in the veins of the legs and pelvis. They are known as a deep vein thrombosis (DVT). The clot can sometimes break free and enter with the blood flow into the lungs and make you very sick. This is called pulmonary embolism (PE). They can result in death. An IVC filter prevents a large PE by trapping a clot before it reaches the lungs.

Who should have an IVC filter?

The usual treatment for DVT and PE is drug treatment to thin the blood. This is usually with warfarin. In a few patients, warfarin does not prevent further PEs, and in others thinning the blood is too risky. When this happens, patients are considered for treatment by inserting an IVC filter. Very occasionally, a patient is advised to have an IVC filter inserted even though they do not have a DVT or PE at that time. Your doctors will explain the reasons why they think you should have an IVC filter.







What happens during IVC filter placement?

A trained specialist doctor called an interventional radiologist along with a team which includes a radiographer and nurse will perform your IVC filter procedure.

- You will be asked to change into a hospital gown.
- You might be asked to remove certain items of clothing and jewellery.
- You will be asked to confirm some details including date of birth and pregnancy status.

The procedure will take place in the angiography suite within the radiology department.

You will lie on the X-ray table, generally flat on your back. You may have monitoring devices attached to your chest and finger and may be given oxygen.

The procedure is performed under sterile conditions and the interventional radiologist and radiology nurse will wear sterile gowns and gloves to carry out the procedure. The skin near the point of insertion, usually the neck but occasionally the groin, will be swabbed with antiseptic and you will be covered with sterile drapes.

The skin and deeper tissues over the vein will be numbed with local anaesthetic. A fine tube (catheter) will be inserted and guided, using the X-ray equipment into the correct position. Small amounts of dye (contrast agent) are used to check the position of the catheter. The filter is passed through the tube to the exact site and released. Small hooks grip the wall of the vein and stop it moving away.

Will I feel any pain?

You will feel a sharp scratch when the local anaesthetic is injected. You may still feel some pressure sensation after, but if you feel any pain during the procedure inform the radiologist and they will deal with the pain with the appropriate pain medication.

Are there any risks with this examination?

IVC filter insertion is a very safe procedure. Serious complications are very rare. There may be a small bruise at the needle site and very rarely there may be damage to the vein or blockage of the inferior vena cava. Extremely rarely, the filter can migrate which may require a further procedure to reposition the IVC filter.

If you need a magnetic resonance (MRI) scan in the future, you should tell the person doing the scan that you have a filter.

Radiation risk

Interventional procedures use ionising radiation to form images of your body and provide treatment. Ionising radiation can cause cell damage that may, after many







years or decades, turn cancerous. Radiation exposure during interventional procedures is generally regarded as low but higher radiation doses might be necessary in difficult or complex cases.

We are all at risk of developing cancer during our lifetime. The normal risk is that this will happen to about 50% of people at some point in their life. Having this procedure will increase the chances of this happening by a very small amount.

In some higher radiation dose procedures, there can be a risk of skin damage in the localised area, similar to sun burn. If we think that you are at risk of this, we will inform you before you leave the department.

The radiographer is responsible for making sure that your dose is kept as low as possible and that the benefits of having the x-ray outweigh any risk.

Contrast risk

We will need to give you contrast dye to make areas of your body show up more clearly.

The radiographers will complete a checklist to ensure it is safe for you to have the dye and you will be asked to sign this form as a consent, the specific side effects are documented on the checklists that you complete.

The contrast dye that is sometimes used can cause allergic reactions however the staff available will be checking for any risks before we proceed.

is there anything I need to inform you of before I attend for my appointment?

Pregnancy:

Radiation can be harmful for an unborn baby. If you are or think you may be pregnant you must tell the radiographer before the examination.

Each examination request will be checked by the radiographer / radiologist to make sure it is properly justified and necessary.

How do I prepare for my IVC Filter placement?

Insertion of an IVC filter is usually carried out as a day case procedure under local anaesthetic. If you have any allergies or have previously had a reaction to the dye (contrast agent), you must tell the radiology staff before you have the test. You should not drive to this appointment. Please leave all valuable items at home.

Help and support in the department

If you have any medical problem which you feel may affect your safety in the department, or if you feel you may need any assistance, please let us know when you arrive.







Do I need to give my permission (consent)?

The interventional radiologist will explain the procedure and ask you to sign a consent form. Please feel free to ask any questions that you may have and, remember that even at this stage, you can decide against going ahead with the procedure if you so wish.

How long will it take?

Every patient is different, and it is not always easy to predict; however, expect to be in the radiology department for about an hour.

What happens after the IVC filter insertion?

Nursing staff will carry out routine observations including pulse and blood pressure and will also check the treatment site. You will generally stay in bed for a couple of hours, and you will be able to go home. You will not be able to drive after the procedure and will need to arrange for someone to take you home. Take it easy for the rest of the day but you can resume normal activities the next day.

How long will the filter stay in?

Modern IVC filters can be left in permanently; however, it is becoming more common for these devices to be a temporary solution and removed when they are no longer required. This is often at three months but may occasionally be longer.

What should I do if I have a problem?

You should not have any problems that is a result of the IVC filter insertion procedure.

If you feel your condition has changed, or you need further medical advice before receiving your results/after leaving the hospital, please make an appointment with the doctor that referred you, or in an emergency, go to your nearest Emergency Department (ED).

How can I provide feedback for the appointment I have attended today?

The Division of Imaging welcomes feedback from all our patients. We actively take part in the Friends and Family Test and we complete a patient experience questionnaire every month to obtain feedback on the experiences you have had.







Please speak to a member of staff regarding the feedback or there are posters within the department with QR codes so you can complete these online.

Contact us

For contact information please refer to your appointment letter or if you are an inpatient please direct your queries to one of the medical staff on the ward

Language and accessible support services:

If you need an interpreter or information about your care in a different language or format, please get in touch.

Your comments and concerns

If you would like to provide feedback you can:

- Ask to speak to the department lead / manager.
- Write to us: Patient Advice and Liaison Services, 1st Floor, Cobbett House, Manchester Royal Infirmary, Oxford Road, Manchester, M13 9WL.
- Log onto the Patient Opinion website www.patientopinion.org.uk/ click on 'Tell your Story'

If you would like to discuss a concern or make a complaint:

Ask to speak to the department manager – they may be able to help straight away. Inpatients can speak to a senior nurse or manager by contacting the Tell Us Today service on (0161) 701 1999.

Contact our Patient Advice and Liaison Service (PALS) on (0161) 276 8686 email: pals@mft.nhs.uk. Ask for our information leaflet.

We welcome your feedback so we can continue to improve our services.

NHS 111

This service offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

Telephone:	111, 24 hours a day
Website:	www.111.nhs.uk

Finally

Some of your questions should have been answered by this leaflet but remember that this is only a starting point for discussion about your treatment with the doctors looking after you. Further information can be obtained by contacting the radiology department that is performing the procedure. Do satisfy yourself that you have received enough information about the procedure, before you sign the consent form.



