

Division of Imaging

## Information for Patients

# Inferior Vena Cava Filter Removal

The aim of this leaflet is to provide you with information to help you understand more about having your inferior vena cava (IVC) filter removed.

## What is an IVC filter?

You have had an IVC filter (a small metal device) placed in a large vein called the inferior vena cava (IVC) which drains blood from the legs and lower part of the abdomen.

It is possible to remove some IVC filters if they are no longer required.

It has been decided that your filter can be removed.

The procedure is very similar to the insertion procedure.

## What happens during the IVC Filter removal?

A trained specialist doctor called an interventional radiologist will perform your IVC filter removal procedure along with a team which includes radiographers and nurses

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

The IVC filter will be removed in the interventional radiology suite, and 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 through a mask or tubes in your nose.

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 washed 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 special catheter (thin plastic tube) is inserted into a large vein in your neck or groin and moved into position to the site of the filter in the vena cava.

Small amounts of dye (contrast agent) are used to check the position of the filter. A removable IVC filter has a small hook at one end that enables the catheter to capture the filter, close it, pull it into the catheter and then withdraw it from the body.

At the end of the procedure, the catheter will be removed and pressure will be applied to stop any bleeding.

## 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 removal 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.

Occasionally the filter may have changed position, which can make it harder to retrieve.

### 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 radiologist and radiographer will keep the X-ray dose as low possible. The radiologist (doctor) will discuss the procedure, including the risks and benefits, with you and you will be able to ask any questions.

### Contrast risk

We will 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 removal and who will I see?

In the week prior to the procedure you will have an appointment for a pre-operative clinic led by radiology nurses where bloods, a COVID-19 swab, medical history, observations and consent will be taken.

On the day of the procedure you will be seen by a specially trained team led by an interventional radiologist within the Radiology Department. Interventional radiologists have special expertise in reading the images and using imaging to guide catheters and wires to aid diagnosis and treatment.

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 procedure.

**You will not be able to drive after this procedure**, therefore you should arrange for someone to collect you when you are ready to leave the department.

Please leave all valuable items at home. We need to know the clotting status of your blood before the procedure. Please telephone us if you are taking any of the following:

- Warfarin
- Synthrome
- Rivaroxaban
- Dabigatran
- Apixaban

Or any other medication to thin your blood.

**Clothes and accessories:**

There are some clothes that can affect the quality of the x-ray and you may be asked to remove them and wear a hospital gown.

You may also be asked to remove jewellery, dentures, glasses and any metal objects or clothing that might interfere with the x-ray images.

**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 radiologist will ask you if you are happy for the examination to go ahead and to sign a consent form. This is called informed consent.

If you do not wish to have the examination or are undecided, please ask the radiologist so that they can answer any questions you may have.

Remember, it is your decision. You can change your mind at any time and your wishes will be respected.

**How long will it take?**

Every patient is different, and it is not always easy to predict how long it will take, however, expect to be in the Radiology department for about 2-3 hours.

**What happens after an IVC Filter removal?**

Nursing staff will carry out routine observations, including pulse and blood pressure, and will also check the treatment site.

You will generally stay in the department on a trolley for a couple of hours and you should be able to go home later the same day. Take it easy for the rest of the day but you can resume normal activities the next day.

**When will I get my results?**

The radiologist will let you know how the outcome after the procedure has been completed.

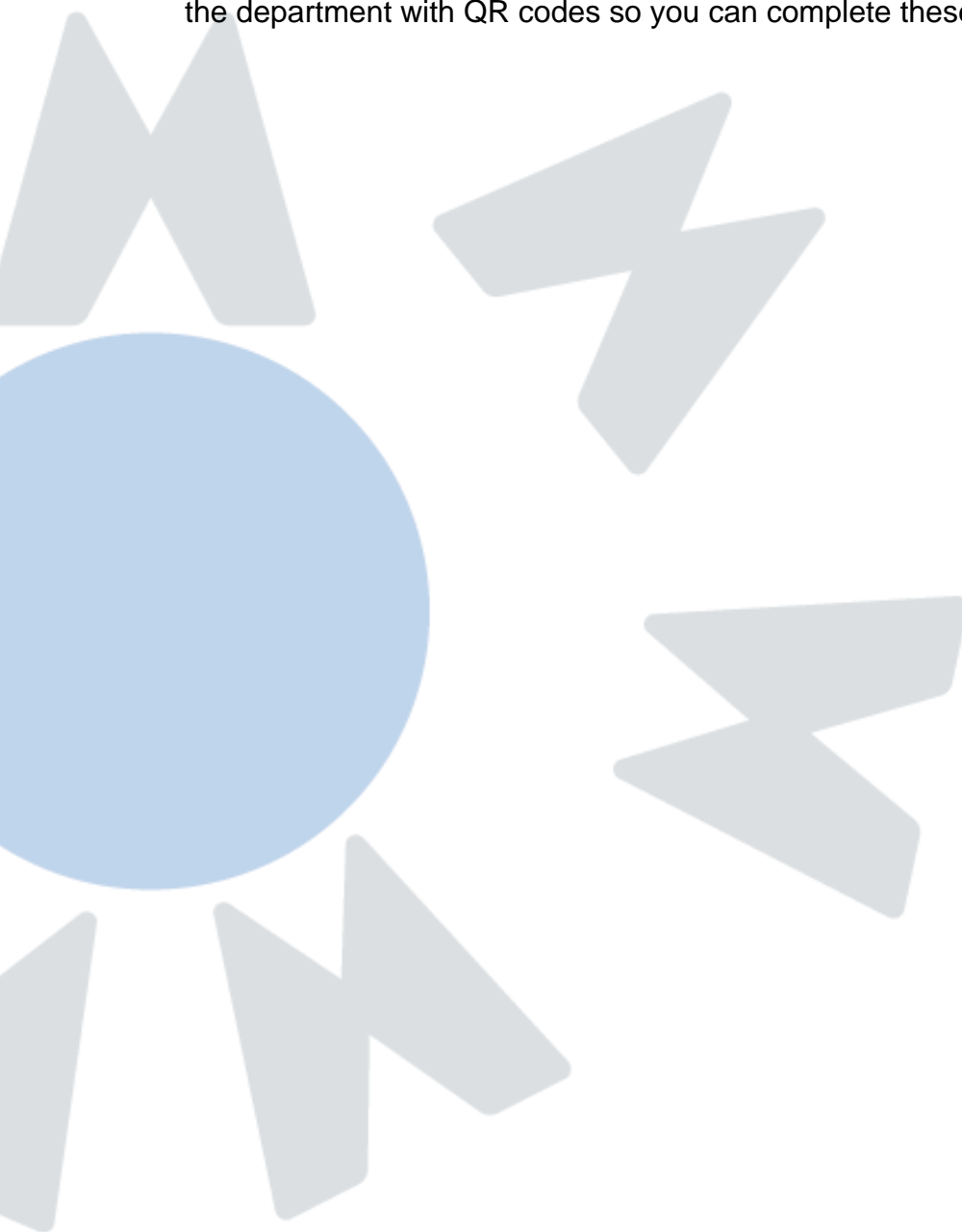
## What should I do if I have a problem?

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

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, 1<sup>st</sup> Floor, Cobbett House, Manchester Royal Infirmary, Oxford Road, Manchester, M13 9WL.
- Log onto the Patient Opinion website [www.patientopinion.org.uk/](http://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](mailto: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](http://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.