

# Having a vena cava filter removed

Department of Radiology

Information for Patients

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## Introduction

This leaflet tells you about the procedure called removal of a vena cava filter. It tells you about how the procedure is done and what the possible risks are. This will help you to decide whether or not to have the procedure.

## Why do I need my vena cava filter taken out?

Vena cava filters are usually only kept in for a short time of about 6 weeks. Your vena cava filter was put in because you had a high risk of a blood clot travelling to your lungs. Your doctor has decided that your risk is now much lower and the filter should be taken out. If your filter is left in for a long time, there is a risk that it could break or get blocked with a blood clot.

## How do I get ready for my procedure?

This is usually done as a day-case (go home the same day) unless you are already staying in hospital overnight as an inpatient.

- continue to drink clear fluids (water or fruit juice) until 1 hour before the procedure.
- **do not eat or drink for 1 hour** before the procedure.
- **make arrangements for after the procedure:**
  - **arrange for someone to drive you home** if you are having the procedure as a day case.
  - if you are having sedation and having the procedure as a day case **an adult must stay with you for 12 hours and you must not drive for 24 hours afterwards.**

**Health information and support is available at [www.nhs.uk](http://www.nhs.uk)  
or call 111 for non-emergency medical advice**

Visit [www.leicestershospitals.nhs.uk](http://www.leicestershospitals.nhs.uk) for maps and information about visiting Leicester's Hospitals  
To give feedback about this information sheet, contact [InformationForPatients@uhl-tr.nhs.uk](mailto:InformationForPatients@uhl-tr.nhs.uk)

## Important information about medication that thins the blood

If you are taking medication that thins the blood (anticoagulants or antiplatelets) it may need to be stopped or replaced with a different one for a few days.

Please call the radiology department for advice by phoning the number on your appointment letter as soon as possible. You will be asked what blood thinning medication you are taking, how much you take (the dose), and what you are taking it for.

**Common examples of these drugs include aspirin, warfarin, clopidogrel (Plavix®), apixiban (Eliquis), rivaroxaban (Xarelto), ticagrelor (Brilinta), Dalteparin and Heparin.**

You may have already been given instructions on blood thinners by the doctor who referred you for this procedure. Please still call the radiology department so we can check this.

## Will I need to take blood thinning medication (anticoagulation) after my vena cava filter has been taken out?

This will depend on the reason that the filter was put in. The doctors who usually look after you will tell you if you need to take blood thinning medication after the procedure.

## Important information

The contrast liquid used in your procedure has iodine in it. It is removed from your body by your kidneys in your wee (urine) or at your routine dialysis if you have dialysis.

**Please tell the X-ray staff when you arrive if:**

- **You are allergic to iodine or rubber (latex)**, have any other allergies or have asthma.
- **You have ever had a reaction to an intravenous contrast liquid** (this is the dye used for kidney X-rays and CT scanning and X-rays of your heart and blood vessels).
- **You are on renal dialysis or have any problems with your kidneys.**
- **You have diabetes.**
- **There is any chance that you may be pregnant.**

The radiographer will ask you some questions about your health before the test starts to see if you might be allergic to the contrast liquid.

Some patients get a warm feeling and a metallic taste when the injection is given and sometimes may feel sick. If you do get these feelings they usually last about one minute. Please let the staff who are with you know if you get these feelings. Some patients will also have the feeling that they are passing urine but they are not actually doing so. This is also normal.

## Asking for your permission (consent)

The doctor who referred you should have talked to you about the reasons for this procedure and any other options.

You have been referred to a doctor who is specialised in imaging and X-ray treatments (a Radiologist). They will confirm that you understand why the procedure is being done, the potential risks and the chances of success.

You will sign a consent form to confirm this. **You should feel that you have had enough explanation before you sign the consent form.** If after talking to the hospital doctor or Radiologist you do not want to have the procedure then you can decide against it at any time.

If the Radiologist feels that your condition has changed they will talk to you about whether the procedure is still needed. They may ask for the doctor who wanted you to have the procedure to talk to you and review your condition.

If you feel during the procedure that you do not want it to continue we will explain the implications of not doing so to help you fully decide.

## What happens during the procedure?

- The procedure will usually take place in the X-ray department.
- You may be shown to a cubicle to take off some of your clothes and put on a hospital gown.
- A needle may be put into a vein in your arm, either on the ward or when you arrive for your procedure. This is so that you can be given medication if needed.
- You may be given a sedative to help you feel relaxed and relieve anxiety. The sedative will make you feel drowsy but not make you to sleep. The Radiologist will talk to you about this if it is needed.
- You will lie on the X-ray table flat on your back.
- You will be attached to a blood pressure monitoring machine and have a small monitoring device (peg) attached to your finger to check your heart rate (pulse).
- Everything will be kept clean (sterile). Your skin will be cleaned with antiseptic. This may feel cold. You will have some of your body covered with sterile sheets.
- The filter is taken out through the vein in your neck. The skin and deeper tissues over the vein in your neck will be numbed with local anaesthetic. When the local anaesthetic is injected it will sting to start with, but this soon wears off and the skin and deeper tissues should then feel numb. If the procedure does become uncomfortable you should tell the member of staff who will be with you throughout the procedure.
- X-rays will be used to check where filter in the vein is.
- A small amount of a colourless liquid that shows up on X-rays (contrast liquid) will be injected into the blood vessel to check that the filter is able to be taken out safely.
- The doctor will use a thin tube (called a catheter) to hook on to the filter. The filter will then be closed (like an umbrella closing) and both filter and catheter will be removed. The doctor will then press on your skin for a few minutes to prevent any bruising or bleeding.

## How long will the procedure take?

Every patient's situation is different. It is not always easy to know how difficult or how straight forward the procedure will be.

The procedure usually takes about 30 minutes but you could be in the X-ray department for 2 hours.

## What happens after the procedure?

- You will be taken back to your ward.
- Nurses will do routine observations such as taking your pulse and blood pressure. This is to make sure that there are no problems. They will also look at the skin entry point to make sure there is no bleeding from it.
- You will stay in bed for a few hours until you have recovered.
- Then you should be able to go home unless you are already an inpatient.
- If you have any problems after the procedure please speak to the nurses in radiology or the staff on the ward.
- **Do not drive home.** If you are going home after the procedure, someone else must drive you home.
- You should take it easy for the rest of the day but you can carry on normal activities the day after.

## If you had sedation please follow the advice below.

The sedative injection can last longer than you think, and can stay in your body for up to 24 hours.

**For 12 hours:** a responsible adult must stay with you for 12 hours. An adult must take you home. If you are being transported by ambulance you must have someone waiting at home to stay with you.

### **For 24 hours:**

- Do not drive a car, climb ladders or ride a bicycle.
- Do not operate machinery or do anything needing skill or judgment.
- Do not make important decisions or sign any documents.
- Do not drink alcohol.

**If you have any problems when you go home please call your GP surgery or call the NHS helpline on 111.**

## Are there any risks or complications?

As with any procedure or operation, complications are possible. We have included the most common risks and complications in this leaflet. The possibility of these happening is different for each person. We will talk to you about your risks before you sign the consent form.

- **Bruising** - there may be a small bruise, called a haematoma, around the site where the needle has been inserted. This is quite normal. If this becomes a large bruise, then there is a risk of it getting infected and this would need antibiotics. This does not happen very often.
- **Damage to the vein** - very rarely some damage can be caused to the vein by the catheter. This can cause circulation problems and may need surgery or another X-ray procedure.
- **Infection** - with any surgical procedure there is a risk of an infection happening. To keep this risk as small as possible the procedure is done under sterile conditions with sterile gloves, gowns and equipment.
- **Perforation of the vein wall** - the risk of this happening is low and is unlikely to have any effect on you. The risk of this is less than 1 in 60 patients.
- **Filter movement** - sometimes the filter can move during removal. The risk of this is less than 1 in 300 patients.
- **Filter cannot be removed** - sometimes the filter cannot be removed. Sometimes there is a large blood clot in the filter. A decision will then be made as to whether to wait some time for the clot to dissipate (to be broken down and disappear) and remove the filter at a later date; or leave the filter in permanently. Sometimes it gets stuck so firmly that it can't be removed. If this is the case then this will be discussed with you.
- **Side effects from the contrast liquid** - you may get a warm feeling and / or a metallic taste when the injection of the contrast liquid (X-ray dye) is given and sometimes can feel sick. If you do get these feelings they usually last about 1 minute.
- **Reaction to contrast liquid** - some patients may be allergic to the contrast liquid and may have symptoms such as feeling or being sick (nausea or vomiting), or a rash. If you get any of these symptoms at the hospital, tell the doctor, nurse or other staff looking after you. If you develop symptoms at home you should contact your GP or call 111.

The overall risk of any complication, including minor ones, is between 5 and 8 patients in 100 (5 to 8 %).

The procedure is normally very safe, and is usually carried out with no significant side effects at all.

During and after your procedure the staff will check your health. This is to look out for any complications and treat them if needed.

**If you have any problems when you go home please call your GP surgery or call the NHS helpline on 111.**

## What are the risks from exposure to radiation in this examination?

The main risk from exposure to X-rays is an increase in the risk of getting a cancer in the future. This risk is thought to be very small. We are all exposed to natural background radiation every day of our lives. This comes from the sun, food we eat, and the ground. Each examination that uses X-rays gives a dose on top of this natural background radiation. The risks of radiation are slightly higher for an unborn child so we must ask some patients aged 10 to 55 years about their periods and possibility of being pregnant. The radiation from the x-rays during a vena cava filter is equivalent to receiving about 14 months of natural background radiation.

The benefits of this examination are likely to outweigh any potential risk and the risk from not having the examination could be greater. We will take all safeguards to minimise the amount of X-rays you are exposed to during your examination.



## What if I need to talk to someone?

If you have any questions or concerns, or cannot make the appointment please call the radiology department on **0116 258 8765** and select **option 7**. Monday to Friday 9am to 5pm. Excluding bank holidays.

**If you have any problems when you go home please call your GP surgery or call the NHS helpline on 111.**

## Any questions?

If you have any questions you can write them down. This is to remind you to ask when you come for your treatment.

اگر آپ کو یہ معلومات کسی اور زبان میں درکار ہیں، تو براہ کرم مندرجہ ذیل نمبر پر ٹیلی فون کریں۔  
على هذه المعلومات بلغةٍ أخرى، الرجاء الاتصال على رقم الهاتف الذي يظهر في الأسفل

જો તમને અન્ય ભાષામાં આ માહિતી જોઈતી હોય, તો નીચે આપેલ નંબર પર કૃપા કરી ટેલિફોન કરો

ਜੇ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਭਾਸ਼ਾ ਵਿਚ ਚਾਹੁੰਦੇ ਹੋ, ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਹੇਠਾਂ ਦਿੱਤੇ ਗਏ ਨੰਬਰ 'ਤੇ ਟੈਲੀਫੋਨ ਕਰੋ।

Aby uzyskać informacje w innym języku, proszę zadzwonić pod podany niżej numer telefonu

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