

Radiology department

Vena cava filter

This leaflet tells you about the procedure known as vena cava filter insertion. It explains what is involved and the benefits and risks. It may make you think of the things you would like to discuss with your doctor.

What is vena cava filter and why do I need one?

A vena cava filter is a small wire mesh about 5 cm (2 inches) long. The filter is placed in the the large vein in the abdomen which brings blood back to the heart from the legs and pelvis (vena cava). If there are blood clots in the veins in the legs or pelvis, these could pass up the vena cava and into the lungs. The filter will trap these blood clots and help prevent them entering the lungs and causing problems.

Your doctors have decided that blood thinning drugs (known as anti-coagulants) are not working effectively to treat the clots on their own and feel that the filter is the best treatment option for you.

Who has made the decision?

Your doctors and the radiologist inserting the vena cava filter will have discussed the situation, and feel this is the best treatment option.

What to tell the doctor

- If you have any allergies.
- If you have had a previous reaction to intravenous contrast medium (the dye used for some X-rays and CT scanning).
- It is important to tell the doctor or the radiology department **before attending for admission** if you are taking medication to prevent blood clots. Below is a list of some of the medications which are used to thin the blood and help to prevent blood clots.

If you are currently taking any of these medications, please contact your referring doctor or the radiology department on 0161 918 2346 as soon as possible, as these may need to be stopped prior to your procedure. Failure to do so may result in your procedure being postponed.

Apixaban
Clexane
Clopidogrel

Dabigatran
Dalteparin
Enoxaparin

Fragmin
Rivaroxaban
Warfarin



Is there any preparation for my filter?

You may need to have your blood tested a few days before, or on the day of the procedure. This is just to check that it is safe to go ahead.

Most patients will be able to go home after the procedure is done, however it is sometimes necessary for you to stay overnight. Please make sure you bring any regular medications with you into hospital. You may also bring an overnight bag with any belongings you will need such as pyjamas, toiletries and mobile phone.

The radiologist (specialist doctor) will explain the procedure and any possible risks to you and ask you to sign a consent form.

Agreeing to treatment

We will ask you to sign a consent form agreeing to accept the treatment that you are being offered. The basis of the agreement is that you have had The Christie's written description of the proposed treatment and that you have been given an opportunity to discuss any concerns. You are entitled to request a second opinion from another doctor who specialises in treating this cancer. You can ask your own consultant or your GP to refer you.

Your consent may be withdrawn at any time before or during this treatment. Should you decide to withdraw your consent, then a member of your treating team will discuss the possible consequences with you.

Who will be inserting the vena cava filter?

A radiologist (specialist doctor) will insert the filter. Radiologists have special expertise in using ultrasound and X-ray equipment, and also in interpreting the images produced. They need to look at these images while carrying out the procedure.

Where will the procedure take place?

In the integrated procedure unit (IPU, department 2) in the special procedure room.

What happens during insertion of a vena cava filter?

On arrival to the IPU you will have the opportunity to discuss the procedure with the radiologist or the radiology nurse specialist. They will explain all the benefits and possible risks associated with this procedure and will ask you to sign the consent form.

- We will ask you to put on a hospital gown and you will lie on the X-ray table, generally flat on your back. You will have monitoring devices attached to you (blood pressure cuff on your arm, stickers on your chest to monitor your heart and an oxygen saturation probe on your finger).
- The radiologist needs to keep everything as sterile as possible and will wear a theatre gown and gloves. The skin around the puncture site is swabbed with antiseptic and the area is covered with theatre towels.
- The skin and deeper tissues over the vein will be numbed with local anaesthetic which will sting for a short time until the area is numb. Using ultrasound and x-rays, the radiologist will then access the vein and determine the safest place to position the filter.
- The filter will then be inserted into the vein and all other equipment removed.
- Pressure will be applied to the vein for a short while until any bleeding has stopped.

Will it hurt?

You may feel some discomfort in the skin and deeper tissues during the injection of the local anaesthetic. After this, the procedure should not be painful. There will be a nurse, or another member of clinical staff looking after you. As the dye passes around your body, you may get a warm feeling. However, this soon passes and is not a cause for concern.

How long will it take?

This will vary from patient to patient and it is not always easy to predict how long it will take. However, you should generally expect to be in the procedure room for about 1 hour.

What will happen afterwards?

You will be taken back to the recovery bay on the IPU if you are an outpatient, or back to your ward if you are an inpatient. The nurses there will carry out routine observations, such as your blood pressure and pulse at regular intervals. They will also look at the puncture site to make sure there is no bleeding from it. If there are no complications and you are an outpatient, you will be discharged home after a couple of hours.

Are there any risks or complications?

Vena cava filter insertion is a safe procedure, but there are some risks and complications.

- There may occasionally be a bruise or bleeding from the site where the needle has been inserted.
- Very rarely, some damage can be caused to the vein or the nearby artery and this may need to be treated by a blood transfusion or another procedure.
- In about 3 out of 100 procedures the filter can become blocked by a clot. This may cause swelling of the legs. You may need to take medication to dissolve the clot.
- As with any mechanical device, there is the possibility that the filter will eventually fail to work properly or may move.
- There is a very small risk of the filter moving to the wrong place or even the heart or lungs.
- The filter can stay in place for as long as it is needed. For some patients it is left in permanently and in others it is removed after a period of time (usually after planned surgery). Occasionally it may not be possible to remove the filter, in such cases there is a chance that you may need to take blood thinning medication for the rest of your life.
- There is also a small chance of infection during the procedure.

Despite these possible complications, the procedure is normally very safe, and the benefits are likely to outweigh the risks.

What are the benefits of the procedure?

The benefit is to reduce the risk of large clots on the lung (pulmonary embolus), which can be life-threatening.

What are the alternatives?

Other treatment options include doing nothing or continuing with blood thinning medication. Your doctors will discuss other treatments you may need.

Further information

Further information is available from the radiology department on the phone numbers below or from the following websites:

Macmillan Cancer Support

www.macmillan.org.uk

British Society of Interventional Radiology

www.bsir.org

Contacts

If you have any concerns or questions, call the radiology department on **0161 918 2346** Monday to Friday, 9am to 5pm.

Out of hours and at weekends, ring The Christie Hotline on **0161 446 3658** (24 hours a day, 7 days a week).

If you need information in a different format, such as easy read, large print, BSL, braille, email, SMS text or other communication support, please tell your ward or clinic nurse.

The Christie is committed to producing high quality, evidence based information for patients. Our patient information adheres to the principles and quality statements of the Information Standard. If you would like to have details about the sources used please contact **the-christie.patient.information@nhs.net**

For information and advice visit the cancer information centres at Withington, Oldham, Salford or Macclesfield. Opening times can vary, please check before making a special journey.



Contact The Christie Hotline for
urgent support and specialist advice
The Christie Hotline: 0161 446 3658
Open 24 hours a day, 7 days a week