Royal Surrey
County Hospital
NHS Foundation Trust

Inferior Vena Cava (IVC) filter insertion

Radiology Department

Patient information leaflet

This leaflet informs you about the procedure known as an Inferior Vena Cava filter insertion. It explains what is involved and the possible risks.

The benefits and risks of this procedure should already have been explained to you by your doctor. If you have any concerns about the procedure, you should discuss these with your consultant prior to being admitted. You will have an opportunity to ask the radiologist any other questions you may have. Please make sure you do this before you sign the consent form.

The Radiology Department

The radiology department may also be called the x-ray department or diagnostic imaging department. It is the facility in the hospital where radiological examinations of patients are carried out, using a range of equipment. This examination will take place in the area of the department known as the Interventional suite.

Who does what?

Radiologists are specialist doctors trained to interpret x-rays and carry out more complex examinations.

They are supported by **specialist radiographers**, who are highly trained to carry out x-rays and other imaging procedures.

Radiology nurses are specialist nurses who will assist the radiologist and care for you throughout the procedure until you are handed back to the ward nurses, who will collect you from the Interventional Suite.

Prior to this procedure being performed, the radiologist will explain fully what is involved and you will have the opportunity to ask any questions you have regarding the procedure.

A written consent will be required. (You should have sufficient explanation before you sign the consent form)

What is an IVC filter insertion?

A vena cava filter is a small metal device about an inch long shaped rather like the spokes of an umbrella. The filter is placed in the inferior vena cava (IVC), the large vein in the abdomen which brings blood back from the legs and pelvis towards the heart. If there are blood clots in these veins they could pass up the IVC and into the lungs. The filter will trap these blood clots and prevent them from entering the lungs and causing problems.

Why do I need an IVC filter?

Other tests that you have undergone have shown that you have clots in the veins in your legs or pelvis, and that there is a significant risk of these passing into the lungs. Generally, these problems can be treated effectively with blood thinning drugs, called anti-coagulants, but in your case it is felt that an additional method of dealing with the blood clots is required.

Who has made the decision?

The consultant in charge of your case, and the radiologist carrying out the IVC filter insertion will have discussed the situation, and feel that this is the best treatment option. However, you will also have the opportunity for your opinion to be taken into account and if, after discussion with your doctors, you do not want the procedure carried out, you can decide against it.

Is there an alternative procedure?

There is no alternative procedure available.

Who will be doing the procedure?

A radiologist with special expertise in using x-ray and scanning equipment. He/she will use the real time x-ray images to carrying out the procedure.

Do I need to do anything before my appointment date?

Please ring the radiology department if you take Warfarin, Aspirin or Clopidogrel or anything that thins your blood.

If you have Diabetes – Please phone and tell us. If you are taking Metformin / Glucophage we will need to modify your medication for two days after the procedure.

Ladies – if you are pregnant, or think you may be pregnant please phone us before your appointment. We may need to change or cancel your appointment.

How do I prepare for an IVC filter insertion?

You need to be an inpatient in the hospital. You will have been allocated a bed on either the Surgical Short Stay Unit (SSSU), Medical Day Unit (MDU) or a ward. The location will be written on the appointment letter accompanying this patient information leaflet.

You will be asked to **attend the ward three hours** prior to your appointment to allow bloods to be taken so the results are available before the procedure. **You will be asked not to eat for four hours** but you can drink water up to two hours prior to the procedure, unless otherwise advised.

You will be asked to put on a hospital gown and a cannula (a small plastic tube) will be inserted in a vein on the back of your hand.

If you have any allergies, you **must** let the staff looking after you know. If you have previously reacted to intravenous contrast medium (the dye used for kidney x-rays and CT scans) then you must tell the radiographers.

Can I bring a relative or friend?

Yes, but for safety reasons, they will not be able to accompany you into the x-ray room, except in very special circumstances.

You will need to arrange for someone to collect you and drive you home after your required amount of bed rest, and you will need someone to stay with you overnight.

What happens during an IVC filter insertion?

You will be transported from the ward to the Radiology department on a bed.

For the examination you will need to lie flat on your back on an x-ray couch.

During the procedure we will monitor your blood pressure, ECG (heart tracing) and pulse.

The most common approach into your venous system is via the jugular vein in the neck. This gives us access to most other vessels. The doctor doing the procedure will tell you which vein he/she plans to use.

The doctor and a radiology nurse will prepare and put on sterile gown and gloves. There will be other staff in the room to look after you and to operate the x-ray equipment.

The skin around your neck will be cleaned with antiseptic fluid and your body covered with sterile towels.

The skin and deeper tissue over the vein will be numbed with local anaesthetic and then a catheter (narrow tube) will be inserted into the vein. Once the catheter is in the vessel you should not feel it move in your body. You will have an x-ray camera over you with which the doctor can follow the position of the catheter.

Contrast medium (x-ray dye) is injected into the catheter to visualise the IVC. You may feel a warm feeling in your body as the contrast is injected. The IVC filter is deployed by passing a guiding catheter down the vessel to the level required. The filter is then released through the outer catheter.

Will the procedure be painful?

When the local anaesthetic is injected, it will sting to start with, but the area will soon become numb.

We will also be able to give you some sedation through the cannula in your arm if necessary to make you more relaxed.

What happens afterwards?

The guiding catheter will be withdrawn and the radiologist will press firmly on the puncture point for five minutes, to allow the vessel to seal and prevent bleeding. After the vein has stabilised, you will be transferred to your ward bed and made comfortable.

You will be asked to stay in your bed on the ward for two hours to allow the puncture site to settle. The ward nurse will check your blood pressure, pulse, and injection site at regular intervals.

The doctor who requested the IVC insertion will decide when you can go home.

It may be necessary to give you further treatment.

A self-certification 'sick note' can be obtained from the ward, to cover the time you are off work.

What are the risks or complications?

An IVC filter insertion is considered a low risk examination, although there are some complications that can arise.

You may develop a small bruise around the site where the needle was inserted. This is quite normal.

There is a small risk that the bruise may become very large and uncomfortable forming a haematoma (collection of blood under the skin). Should this happen you may need a small operation to drain the area and you may need antibiotics to control the risk of infection.

Very rarely, some damage can be caused to the vein by the catheter; this may need to be treated by another radiological procedure or surgery.

As with all x-ray examinations, the radiologist will endeavour to keep the exposure to radiation to the absolute minimum.

What are the benefits of having this procedure?

This procedure will prevent the possible passage of clots from the leg or pelvic veins into the lungs.

What aftercare advice should I follow when I get home?

You will need to rest.

Do not take up any strenuous tasks for a few days.

Privacy and dignity

Sometimes tests or procedures, although necessary, can be embarrassing or undignified for patients but we will endeavour to do everything we can to make you as comfortable as possible during your visit to the department.

Patient surveys

We value your opinion on our service and in order to deliver, maintain and improve this service we ask you to complete a short patient questionnaire found with the appointment letter. Completion of this survey is entirely voluntary.

Further information

For further information about Diagnostic Imaging Services at Royal Surrey County Hospital NHS Foundation Trust, please contact:

Royal Surrey County Hospital NHS Foundation Trust
Egerton Road
Park Barn
Guildford
Surrey
GU2 7XX

www.royalsurrey.nhs.uk

Reference source

- Radiology Info.Org – www.radiologyinfo.org/en/info.cfm?pg=venacavafilter

Additional information

- NHS Choices – www.nhs.uk/Conditions/Deep-vein-thrombosis/Pages/Treatment.aspx

Information on radiation

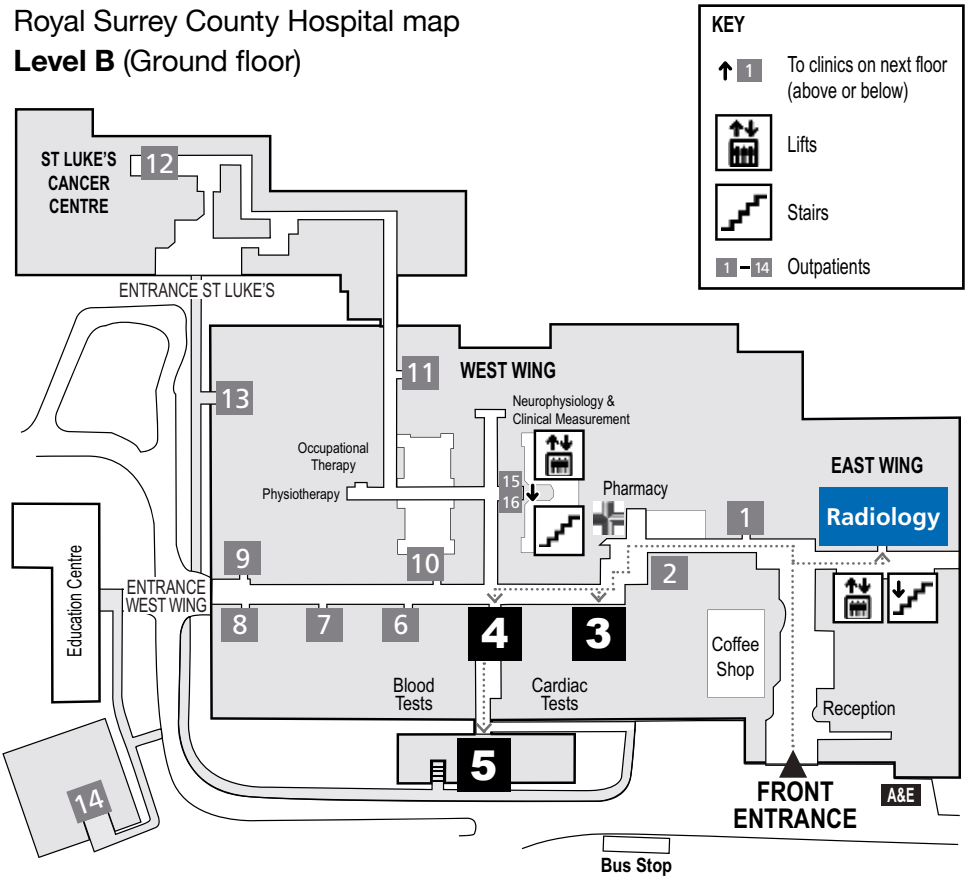
- www.gov.uk/government/publications/ionising-radiation-dose-comparisons/ionising-radiation-dose-comparisons

Notes

Notes

How to find the Radiology Department

Royal Surrey County Hospital map
Level B (Ground floor)



Data sharing reference information is available on Royal Surrey County Hospital patient information leaflet entitled:

Your Healthcare records – your information, **PIN120703–562**

Royal Surrey County Hospital NHS Foundation Trust
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Guildford
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GU2 7XX

www.royalsurrey.nhs.uk

Radiology Department contact details

If you have any questions or would like to know more about this examination, please contact the Radiology Department on:

Telephone: 01483 571122 **ext** 2050 or 01483 464150

Monday–Friday, 9am–5pm

If you are unable to keep your appointment, please contact us as soon as possible.

PALS and Advocacy contact details

Contact details of independent advocacy services can be provided by our Patient Advice and Liaison Service (PALS) who are located on the right hand side as you enter the main reception area. PALS are also your first point of contact for health related issues, questions or concerns surrounding RSCH patient services.

Telephone: 01483 402757

Email: rsc-tr.pals@nhs.net

Opening hours: 9.00am–3.00pm, Monday to Friday

If you would like information documents in large print, on tape or in another language or form please contact PALS.

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