Inferior Vena Cava (IVC) Filter Insertion and Removal Interventional Radiology

This leaflet provides information about the procedure, what to expect on the day, the potential risks and important information for afterwards.

Prior to the procedure, you may have a pre-assessment or telephone consultation, where you will have the opportunity to ask further questions.

Please note that this leaflet is not meant to replace discussion between you and your doctor. You should raise any questions you may have with the doctor who has referred you or with the doctor who will be performing the procedure.

What is an IVC Filter?

The inferior vena cava (IVC) is the large vein that carries blood from the lower body back to the heart.

An IVC filter is a small metal device placed inside this vein to catch blood clots and prevent them from travelling to the lungs, where they could cause a pulmonary embolism.

Most filters are permanent while many are retrievable and can be removed once the risk of blood clots has reduced.

The procedure is minimally invasive and performed under local anaesthetic, usually as a day case.

Why do I need an IVC Filter?

You may need an IVC filter if:

- You have a blood clot in your legs or pelvis (deep vein thrombosis - DVT) and cannot safely take blood-thinning medication
- You have had a pulmonary embolism and cannot receive anticoagulation
- You develop blood clots despite taking anticoagulants
- You are at high risk of blood clots during or after surgery or trauma
- You require temporary protection from blood clots

Your doctor will discuss the reason and whether the filter is intended to be temporary or permanent.

Tel: 01932 723470 **Email:** asp-tr.ir-referrals@nhs.net

How do I prepare for an IVC Filter Insertion or Removal?

You should stop eating 6 hours prior the procedure, however you can drink 1 cup of clear water per hour until the procedure starts.

As it's a day case procedure, you need to arrange for an adult to collect you from the department and someone to stay with you overnight.

The procedure will take place in the Interventional Radiology (IR), within the Radiology Department at St. Peter's Hospital. When you arrive, you will be given a hospital gown to change into, and a staff will insert an IV cannula.

The doctor will discuss the procedure with you; answer any questions you may have and ask you to sign the consent form if you are happy to proceed.

The procedure will likely be performed under local anaesthetic. Intravenous pain relief and light sedation may also be given, to ensure you are as comfortable as possible.

If you are feeling unwell closer to the day of the procedure, please let the team know.

How is an IVC Filter insertion performed?

You will lie on an X-ray table in the Interventional Radiology department.

The skin in the neck (most common) or groin is cleaned and numbed with local anaesthetic.

Using ultrasound guidance, a small plastic tube (sheath) is inserted into the vein.

Contrast dye is injected to identify the correct position.

The filter is then passed through the tube and released into the inferior vena cava.

The tube is removed, and pressure is applied to prevent bleeding. No stitches are usually required.

The procedure usually takes 30 - 60 minutes.

How is an IVC Filter removal performed?

If your filter is retrievable, removal is usually performed once it is no longer needed.

The procedure is similar to insertion and is usually performed through a vein in the neck under local anaesthetic.

A small tube is inserted into the vein, and a special device is used to capture and remove the filter.

The procedure usually takes 30 - 60 minutes.

Not all filters can be removed, particularly if they have been in place for a long time or if removal is unsafe.

What are the potential risks or complications of IVC Filter Insertion?

IVC filter insertion and removal are generally safe procedures. However, as with all procedures, there are some risks:

Pain or discomfort

- Mild discomfort at the puncture site is common and occurs in up to **10-20% of patients**. This usually settles within a few days.

Bruising or bleeding

- Minor bruising or bleeding at the puncture site occurs in approximately **5-10% of patients** and usually resolves without treatment. Significant bleeding is uncommon (**<1%**).

Infection

- Infection at the insertion site is uncommon (**<1%**) and may require antibiotics.

Contrast reaction or kidney effects

- Allergic reactions to contrast dye are uncommon (**<1%**), and serious reactions are very rare (<0.1%).
- Temporary worsening of kidney function may occur in **1-3% of patients**, particularly in those with existing kidney disease.

Filter movement or misplacement

- Movement or incorrect positioning of the filter occurs in approximately **1-2% of cases** and can usually be corrected.

Filter blockage or clot formation

- Clotting around the filter may occur in **2-5% of patients**, which may cause leg swelling or require further treatment.

Difficulty removing the filter

- In some cases (**5-15%**), removal may not be possible due to scar tissue or filter position.

Damage to blood vessels

- Injury to the vein occurs in **less than 1% of cases**.

Filter fracture or migration

- Breakage or movement of filter components is rare (**<1%**), especially with modern filters and regular follow-up.

Serious complications

- Serious complications such as major bleeding, pulmonary embolism during the procedure, or death are **very rare (<0.5%)**.

What happens afterwards?

You will be monitored in a recovery area for a few hours.

Most patients can go home the same day.

You should:

- Rest for 24 hours
- Avoid heavy lifting or strenuous activity for **5-7 days**
- Keep the puncture site clean and dry for **24 hours**

You can usually return to normal activities within a few days.

Follow-up

Your referring consultant will arrange follow-up as needed.

If you have a **retrievable filter**, follow-up is important to assess whether and when it should be removed.

Seek urgent medical attention if you develop:

- Increasing swelling or pain in the neck or groin
- Leg swelling or severe leg pain
- Chest pain or shortness of breath
- Fever or signs of infection

Further Information

We endeavour to provide an excellent service at all times, but should you have any concerns please, in the first instance, raise these with the Matron, Senior Nurse or Manager on duty. If they cannot resolve your concern, please contact our Patient Experience Team on 01932 723553 or email asp-tr.patient.advice@nhs.net. If you remain concerned, the team can also advise upon how to make a formal complaint.

Author: Cathie Tenreiro - IR Clinical Specialist Nurse **Department:** Imaging
Version: 1 **Published:** April 2026 **Review:** April 2029

Interventional Radiology

St Peter's Hospital

Tel: 01932 723470

Email: asp-tr.ir-referrals@nhs.net

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You can use Text Relay to turn telephone communications into text. Use the Relay UK app on your phone, tablet or PC. You can also use Relay UK via Minicom or Uniphone.

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اگر آپ اس کا اردو زبان میں ترجمہ چاہتے ہیں، تو براہ کرم اس فون نمبر 01932 723553 پر رابطہ کریں

Se precisa de uma tradução por favor contacte: 01932 723553

আপনার অনুবাদের দরকার হলে এখানে যোগাযোগ করুন : 01932 723553

यदि आपको अनुवाद की ज़रूरत है तो कृपया इस नंबर पर फोन करें: 01932 723553

Jeżeli chcemy, aby te informacje w innym języku, proszę zadzwonić 01932 723553

Ashford Hospital London Road, Ashford, Middlesex, TW15 3AA Tel: **01784 884488**
St. Peter's Hospital Guildford Road, Chertsey, Surrey, KT16 0PZ Tel: **01932 872000**
Website: **www.ashfordstpeters.nhs.uk**