

# Inferior vena cava filters

Information for patients



This leaflet tells you about Inferior Vena Cava (IVC) filters and the procedure to have one inserted or removed.

### **What is an IVC filter?**

An IVC filter is a small metal device usually placed in a large vein called the inferior vena cava (IVC) that drains blood from the legs and lower part of the abdomen. The IVC filter allows blood to flow through normally but traps any large blood clots, stopping them from getting to your lungs.



### **What is it used for?**

Blood clots sometimes form in the veins of the legs or pelvis. This is called Deep Vein Thromboses (DVT). The clots can sometimes break free from the leg vein and pass with the circulation to the lungs. This is called Pulmonary Embolism (PE) and is frequently a serious problem. It can sometimes be fatal. The filter prevents PE by preventing clot reaching the lungs.

## Who should have an IVC filter?

If you have a DVT or a PE, the usual treatment for it is drug treatment to thin the blood (anticoagulation). This is very effective. In some patients there are unacceptable risks with anticoagulation, for example patients in whom surgery is being planned or patients who have already had an episode of major bleeding. In these circumstances an IVC filter is an alternative treatment.

A small proportion of patients have ongoing PEs despite treatment to thin the blood, or have such poor lung function that another PE could be fatal. In these cases an IVC filter is inserted (as well as anticoagulation) as an additional treatment.

Very occasionally, a patient is advised to have an IVC filter inserted even though they do not have a DVT or PE at that time.

## How is the filter inserted?

Inserting an IVC filter involves feeding a small tube into a vein (blood vessel) in your groin or neck through a very small skin puncture. From here the tube is passed to the IVC. The filter is passed down the tube and released at the correct position.

The procedure is not painful. You will have a local anaesthetic injection to make the area numb when the tube is placed in the groin or neck and after this will only feel some light pushing. There is no need for a general anaesthetic. You do not need to starve before having one inserted or removed.

## **Who will I see?**

A specially trained team led by an interventional radiologist. Interventional radiologists are doctors with special expertise in using medical imaging techniques to undertake procedures through tiny pinholes in the skin.

## **What happens afterwards.**

If you have come from home for the procedure you can go home after an hour or so. You should not drive for 24 hours so should arrange for someone to take you home.

If you are already in hospital you can go back to the ward immediately. There are no special precautions you need to take after filter insertion and you can lead your life as normally.

You may feel a little sore at the needle site for a few days.

## **Are there any risks?**

IVC filter insertion is a very safe procedure. Serious complications such as damage to the vein or blockage of the IVC are very rare (occurring in fewer than 1 in 100 patients).

## **What are the alternatives?**

There are no surgical procedures that can be undertaken instead of an IVC filter insertion.

Sometimes the risk of bleeding on anticoagulation can be altered (for example if surgery can be safely deferred)

though this is not always possible. If it has been some time (three months) since your DVT or PE an IVC filter may not be necessary.

These factors will have been taken into careful consideration before suggesting you have an IVC filter.

### **How long will the filter stay in?**

This depends on why the filter was inserted in the first place, the results of treatments done so far and plans for further treatment. If a filter is no longer needed (for example once a surgical procedure is complete) it can be removed. This is easiest to do within six weeks of the filter being inserted.

We usually make you an appointment for filter removal at time of filter insertion. Please contact us if you cannot make the removal appointment.

### **How is a filter removed?**

Removal of a filter is very like insertion. Local anaesthetic is injected at the neck followed by insertion of a small tube which is navigated using X-rays to the filter. A lasso is used to catch a small hook on the top of the filter which is then gently collapsed, pulled into the tube and removed.

The preparation and aftercare for filter removal are the same as for filter insertion. You will be able to go home the same day.

Occasionally a filter cannot be removed. This is not usually a problem as modern IVC filters are designed to be left in

permanently if necessary. If the filter cannot be removed the vascular radiologist will discuss this with you.

### **Further questions?**

We have tried to answer the most frequently asked questions. However, everyone is different. If there is anything else you need to know, telephone the vascular radiology department (numbers below).

You may find it helpful to use the space on page seven to write down questions or appointment dates and times or contact details.

### **Radiology theatres**

Leeds General Infirmary: **0113 392 3311**

St. James's University Hospital: **0113 206 6841**

***Your notes***

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