

Inferior Vena Cava Filter Placement

The inferior vena cava (IVC) is a large vein in the abdomen that brings blood from the lower part of the body back to the heart.

An IVC filter stops blood clots from moving from the lower part of the body to the lungs.

A physician will do this procedure in the Interventional Radiology (IR) Department. Usually, the filter is stainless steel or nitinol (nickel titanium). The physician puts the filter in the IVC using an X-ray to guide them. The procedure takes about 1 hour.

You may need an IVC filter if you:

- › Have deep vein thrombosis (DVT), a blood clot in the leg
- › Have a pulmonary embolism (PE), a blood clot in the lung
- › Are at greater risk of getting a DVT or a PE
- › Cannot take anticoagulant (blood thinner) medication


Sometimes you may need an IVC filter if anticoagulant medications did not work to stop a DVT or PE.

In some cases, you may need an IVC filter if you have a history of blood clots and are going to have surgery. If this is the case, you cannot take anticoagulant medication after surgery because of the risk of bleeding. The IVC filter will stop a DVT or PE right after surgery.

There are 2 types of IVC filters:

- › Permanent filters that stay in place for the rest of your life
- › Retrievable (temporary or optional) filters that a physician can remove

If you have any questions,
talk with your physician
or nurse.



A retrievable filter can be permanent or the physician can take it out. A physician can remove it when you are no longer at risk for blood clots or when you can start taking anticoagulant medication.

Your physician will talk with both you and the IR physician about which filter is best for you.

You can have both the placement and removal procedures as an outpatient or while you are a patient in the hospital.

Risks

As with any procedure, there are risks. They include:

- › Infection
- › Bleeding
- › Shifting or movement of the filter after the physician puts it in (very rare)

Your physician will discuss all the risks and benefits with you in detail.

Before the procedure

You will talk with a staff member in the IR Department. They will review your history. The IR physician will talk with you about the procedure and the risks.

The physician will insert the IVC filter through a vein in your neck or in your groin. To keep you comfortable, the physician may use:

- › Local anesthesia (numbing medication at the site of insertion)
- › IV (into the vein) medication that will make you relaxed and sleepy

Day of procedure at home

Most patients have IV medication to relax them during the procedure, so:

- › Do not eat solid foods 6 hours before the procedure.
- › Stop drinking water and other clear liquids 3 hours before the procedure. You can take your medications with sips of water, if you need to.
- › You must have a responsible adult to help you get home safely (outpatients only).

What to bring to the hospital

Be sure to bring your:

- › List of allergies
- › List of all your current medications (prescription, over-the-counter and herbal), including the last time you took them
- › Photo ID
- › Medical insurance information and card
- › Medicare card (Medicare patients only)

Please leave all valuables (jewelry, credit cards, money) at home. This includes body piercing jewelry and tongue studs. You may not wear any jewelry during surgery.

Arrival

Patients and visitors can park in the garage at 222 East Huron Street, across from Feinberg and Galter pavilions. For a discounted rate, bring your parking ticket with you. You can validate your ticket at the Customer Service Desks on the 1st and 2nd floor of Feinberg and Galter pavilions, and on the 1st floor of Prentice Women's Hospital.

Check in 1 hour before your procedure. Go to the 4th floor of Feinberg Pavilion at 251 East Huron Street. After you check in with the receptionist on the 4th floor, you and 1 member of your family will meet with staff. They will bring you to the prep and recovery area. They will review your health history, medications and allergies. The physician will do a short exam. After reviewing the procedure and answering any questions you may have, they will ask you to sign a written consent form.

You will change into a hospital gown. The care team will put an IV (into the vein) line in your arm or hand if you are getting IV medication to relax you.

During the procedure

Below is a picture of the room where you will have your procedure. You will be lying on the table. The nurse will help you get on the exam table. They will connect you to heart and blood pressure monitors.



The X-ray machine over the exam table will move over you. But it does not touch you. Your care team uses the machine to guide the placement of the IVC filter.

The care team will clean around the site with a special soap. It may feel cold. They will cover the site with sterile sheets. The physician will inject numbing medication into the area. You will feel some burning as the medication goes in. Using sound wave images (ultrasound), the physician will put a small needle into the vein. Then they will thread a small tube (catheter) into the needle and pass it to the IVC. You may feel pressure. You should not feel any pain.

The care team will inject contrast dye into the catheter. They will take X-ray images of your IVC. The physician will guide the filter into the IVC through the catheter. Once the filter is in place, they will remove the catheter. They will put hard pressure over the puncture site for about 5 to 10 minutes. Then, they will put a small bandage or skin glue over the site. When they finish the procedure, the care team will take you to the recovery area.

After the procedure

A nurse will check your heart rate, blood pressure and the puncture site. Let the nurse know if you have any pain or discomfort. You can go home about 1 hour after your procedure. If you are an inpatient, you will return to your hospital room.

Your nurse will review guidelines about your follow-up care. If you had medication to relax you and can go home, a responsible adult must be with you to help you get home safely.

At home

Diet

You may start your regular diet after discharge. You should drink at least 6 glasses of water (8 ounces each) over the next 24 hours. Water helps to clear the dye used during the procedure.

Activity

On the day you leave the hospital, limit your activities. Do not do physical exercise or heavy lifting (more than 10 pounds) for the next 3 days. Do not drive for 24 hours after the procedure.

You may start all other daily activities 24 hours after the procedure.

Call the IR Department right away at **312.926.5200** (TTY: 711) if you notice any of the following:

- › Swelling or bleeding at the puncture site; if the site is bleeding, hold pressure to the site for 5 to 10 minutes
- › A temperature more than 101 degrees F
- › Redness at the puncture site, or more tenderness or drainage at the site
- › Increased swelling in your legs, or pain in your back, legs or abdomen

Follow-up care for permanent IVC filters

If you have a permanent IVC filter, you will follow up with your primary physician. The physician will talk to you about the next steps in preventing and treating blood clots.

Follow-up care for retrievable IVC filters

If you have a retrievable IVC filter, a nurse or physician from the IVC Filter Clinic in the IR Department will follow up with you and your physician.

2-week follow up

The IVC Filter Clinic coordinator will check your progress to see if your physician can remove your filter. You may be ready if you are:

- › Discharged from the hospital
- › Finished with surgery
- › Given anticoagulant medications
- › Now at decreased risk for blood clots

2 to 6 weeks after placement

The IR physician or nurse coordinator will contact your primary physician to discuss removal of the filter.

You may need a computed tomography (CT) scan of your abdomen and pelvis before your care team can remove the filter. The CT scan will:

- › See if the filter has trapped any clots
- › Check the position of the filter

You may also need a lower extremity duplex exam or ultrasound of your legs before the filter removal. This will check to see if any new blood clots have formed in your legs after you got the IVC filter.

If you need any of the above tests, the IVC Filter Clinic coordinator can help you schedule them before your filter removal procedure.

When it is safe to remove your IVC filter, the IVC Filter Clinic coordinator will contact you and help you schedule the removal procedure.

You may also need a clinic visit before the removal procedure. If so, you will meet with the physician and nurse coordinator to talk about the IVC filter removal procedure. They will answer any questions you may have.

For more information about IVC filters and the IVC Filter Clinic, go to **ivcfilter.nm.org** or call 312.926.0600 (TTY: 711).