

*If you have any questions, ask your physician or nurse.*

## Inferior Vena Cava Filter Retrieval with the Endovascular Laser Sheath

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. You have an IVC filter that stops blood clots from moving from the lower part of your body to your lungs.

Your physician may remove the filter when:

- Your risk for blood clots decreases
- You start taking blood-thinning medications

Note, your physician can choose to remove your filter for a reason not listed.

This handout describes:

- How the filter is removed
- How your physician removes the filter
- Follow-up care after the procedure

The physician will remove the IVC filter in the Interventional Radiology (IR) Department. It does not require a hospital stay.

**You will spend about 4 hours in the IR.**

The physician uses a special tool called the endovascular laser sheath to remove your IVC filter. They will put the laser sheath through a small tube (catheter) inserted into the IVC through a vein in your neck or groin. The tool has a small laser inside the tube that can cut the scar tissue around your filter. The physician will remove the filter through the tube.

The physician will use this tool to remove your filter if:

- They could not remove your filter in the standard way
- You have had your filter for more than 6 months
- Your filter was permanent but they can now remove it

### Risks

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

- Infection
- Bleeding
- Blood clot in the IVC

Your physician will answer any questions you have about the procedure.

## Before the procedure

You or your physician will need to contact the IVC Filter Clinic coordinator. They will gather all the medical information needed for the procedure. If you did not receive treatment at Northwestern Memorial Hospital, the coordinator will need to see all outside medical records. Including:

- Medical history
- IVC placement procedure at another hospital
- Any previous attempts to remove your IVC filter
- X-ray or computed tomography (CT) images of your abdomen and IVC filter, if you had these tests

Your physician and the interventional radiologist will review this information. If they decide to remove the filter with the laser device, you will make these appointments:

### ***IR consult***

This visit is in the Interventional Radiology Department on the 4th Floor of Feinberg Pavilion at 251 East Huron Street, Chicago.

You will meet the IVC Filter Clinic coordinator and interventional radiologist. They will explain the procedure to you and answer any questions you may have. You will sign a consent form for the procedure and the use of the laser. This appointment is about 30 minutes. You may have this consult the same day as the filter removal procedure.

### ***Additional testing (if needed)***

If the physician finds you need more testing before removing the filter, the IVC Filter Clinic coordinator will schedule this for you on the same day or before this visit.

These tests may include:

- CT of your abdomen
- Ultrasound of your legs

## Day of procedure at home

You will have IV medication to relax you during the procedure. Please follow these guidelines:

- Do not eat solid foods or drink anything after midnight before the procedure.
- You can take your medications with sips of water, if needed.
- 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), and the last time taken
- 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, please bring your parking ticket with you. You can validate your ticket at the Customer Services Desks on the 1st and 2nd floor of Feinberg and Galter pavilions, and on the 1st floor of Prentice Women's Hospital.

Please check in at the time given to you on the 4th floor of Feinberg Pavilion at 251 East Huron Street, Chicago. 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 if you have not done so already.

You will change into a hospital gown. The care team will put an IV (into the vein) line in your arm or hand.

## **During the procedure**

The nurse will help you lie on the exam table. They will connect you to heart and blood pressure monitors.

To reach the IVC, the physician will use either the vein in your neck (internal jugular) or the vein in your groin (femoral vein).

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.

Once the physician removes the filter, 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, your care team will take you back to the prep and 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. After about 1 to 2 hours, you can go home or return to your hospital room if you are an inpatient.

Your nurse will review guidelines about your follow-up care. If you had medication to relax you and are going home, a responsible adult must 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 (greater 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:

- Swelling or bleeding at the puncture site; if the site is bleeding, put pressure on the site for 5 to 10 minutes
- A temperature more than 101 degrees F
- Redness at the puncture site, or more tenderness or discharge at the puncture site

## **Follow-up care**

The IVC Filter Clinic coordinator will call you in 1 week to see how you are doing. After that, you will follow up with your primary care physician. If you need to come back for a follow-up visit with the IVC Filter Clinic, the coordinator will arrange that with you.

If you see a new physician, you should mention you have had a history of blood clots and had an IVC filter in the past. This is important if you are:

- Having surgery
- Receiving treatment for a new condition
- Taking new medications

If you are taking anticoagulation or blood thinning medications, such as warfarin (Coumadin®), enoxaparin sodium (Lovenox®) or dalteparin (Fragmin®), be sure to take the routine tests you need to check your blood's clotting time.

If you have signs of bleeding or bruising while taking these medications, please contact your physician.

If you have signs or symptoms of blood clots, contact your physician right away or go to the nearest emergency room. These symptoms include:

- Swelling, pain or warmth in one of your legs
- Sudden shortness of breath, coughing or wheezing

- Chest pain or palpitations (fast heart rate)

For more information about IVC filters and the IVC Filter Clinic, go to [ivcfilter.nm.org](http://ivcfilter.nm.org) or call 312.926.5289 (TTY: 711).