

Inferior Vena Cava (IVC) Filter Placement

If you have any questions, ask your doctor or nurse.

An IVC filter is used to prevent blood clots from moving from the lower part of your body to your lungs. Guided by X-ray, this filter is placed in a large vein (IVC) found in your abdomen. The IVC brings blood from the lower part of your body back to the heart.

Most often, the filter is stainless steel or nitinol (nickel titanium). The filter placement is done in the Interventional Radiology (IR) department and takes about 1 hour.

Most often a filter is placed in patients who:

- Have blood clots in the legs called deep vein thrombosis (DVT) or lungs called pulmonary embolisms (PE).
- Are at greater risk of DVT or PEs.
- Cannot take “blood thinning medicines.”

Filters may also be used when blood thinning medicines have not worked to prevent DVT or PEs. (For more information, please refer to the NMH brochure, *Deep Vein Thrombosis*).

There are two types of IVC Filters:

- Permanent filters that remain in place for the rest of your life.
- Retrievable Filters are also known as Temporary or Optional Filters. These filters can be permanent or removed when you are no longer at risk for clots or you are able to be placed on blood thinning medicines.

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

Both the placement and removal of the filter can be done, either:

- As an outpatient, or
- While you are in the hospital.

Risks

As with any procedure there are risks. They include:

- Infection.
- Bleeding.
- Shifting or displacement of the filter.

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

Before the Procedure

You will talk with a staff member of the IR department. Your history will be reviewed. The IR doctor will review the procedure and its risks.

The IVC can be accessed by either a vein in your neck or in your groin. To keep you comfortable the doctor may use

- Local anesthetic (numbing medicine).
- IV (into the vein) medicine that will make you relaxed and sleepy.

At Home/Day of Procedure

Most patients have IV medicine 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 medicines with sips of water, if needed.
- You must have a responsible adult to assist you in getting home safely (outpatients only).

What to Bring to the Hospital

Please bring:

- Medical insurance information.
- Medicare card (for Medicare patients).
- List of allergies and current medicines (including the last time taken).

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

Parking is available for patients and visitors in the garage at 222 E. Huron, across from the Feinberg and Galter Pavilions. For discounted rates, please bring your parking ticket with you. Tickets can be validated at the Customer Services Desks on the 1st and 2nd floor of the Feinberg and Galter Pavilions, and on the 1st floor of Prentice.

From home you will come to the 4th floor of the Feinberg Pavilion, 251 E. Huron Chicago, 1 hour before your procedure. After you check in with the receptionist on the 4th floor, you and one member of your family will meet with staff who will bring you to the prep and recovery area. Here they will review your health history, medicines, and allergies. A short physical exam will be done. After reviewing the procedure and asking any questions you may have, you will be asked to sign a written consent.

You will change into a hospital gown. An IV (into the vein) line is placed in your arm or hand if you will be receiving IV medicine to relax you.

During the Procedure

Below is a picture of the room where you will have your filter placed. You will be lying on the table. The X-ray machine over the exam table will move over you, but not touch you during the procedure. The machine is used to guide the filter placement.



The nurse will help you lie on the exam table. You will be connected to heart and blood pressure monitors.

The area around the insertion site is cleaned with a special soap that may feel cold. It is then covered with sterile sheets. Numbing medicine is injected into the area. You will feel some burning as the medicine is given. Using sound wave images (ultrasound), the doctor inserts a small needle into the vein. A small tube (catheter) is threaded through the needle and slowly passed to the IVC. You may feel pressure, but you should not feel any pain.

Contrast dye is injected and X-rays of your IVC are done. The filter is guided into the IVC through the catheter. Once the filter is in place the, catheter is removed. Firm pressure is held over the puncture site for about 5 to 10 minutes. A small bandage or skin glue will be placed over the site. You will be taken to the recovery area.

After the Procedure

A nurse will monitor your heart rate, blood pressure, and the puncture site. Let the nurse know if you have any pain or discomfort. After about 1 hour, you will either:

- Be discharged, or
- Return to your hospital room (inpatients).

If you are going home, the nurse will review guidelines about your follow-up care. If you had medicine to relax you, a responsible adult must assist you in getting home safely.

At Home

Diet

You may resume your regular diet after discharge. You should drink at least six, 8 oz. glasses of water 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. No physical exercise or heavy lifting (greater than 10 lbs.) for the next 3 days. Do not drive for 24 hours after the procedure.

You may resume all other daily activities 24 hours after the test.

Call the IR department right away at 312-926-5200 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.
- Fever higher than 101° F.
- Redness at the puncture site, or increasing tenderness or drainage at the site.
- Increased swelling in your legs, pain in your back, legs, or abdomen

Follow-up Care

Permanent Filters

If you had a permanent filter placed you will follow up with your primary doctor. The next steps in preventing and treating blood clots will be discussed.

Retrievable Filters

If you had a retrievable filter placed, a nurse or doctor from the IVC Filter Clinic in the IR department will follow up with you and your doctor.

2-Week Follow up

The IVC Filter Clinic Coordinator will check your progress to see if your filter can be removed. You may be ready for removal if you:

- Were discharged from the hospital
- Had surgery
- Were started on blood thinning medications
- Are now at decreased risk for blood clots.

2 to 6 Weeks Post Placement

The interventional radiologist will contact your primary doctor to discuss removal of the filter. You may need a CT scan of your abdomen and pelvis before the filter can be removed to:

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

Once it is safe for your filter to be removed the IVC Filter Clinic Coordinator will contact you.

You may also be asked to be seen in the clinic before your filter is removed. At your clinic visit you will meet with the doctor and nurse coordinator to talk about the filter removal. Here they will answer all your questions.

Health Information Resources

For more information, visit one of Northwestern Memorial Hospital's Health Learning Centers. These state-of-the-art health libraries are located on the third floor of the Galter Pavilion and on the first floor of the Prentice Women's Hospital. Health information professionals are available to help you find the information you need and provide you with personalized support at no charge. You may contact the Health Learning Centers by calling 312-926-LINK (5465) or by sending an e-mail to hlc@nmh.org.

For additional information about Northwestern Memorial Hospital, please visit our Web site at www.nmh.org.

Para asistencia en español, por favor llamar a el departamento de representantes para pacientes al 312-926-3112.

Northwestern Memorial is an equal opportunity employer that welcomes, respects and serves with dignity all people and does not discriminate, including in hiring, or employment, or admission, or access to, or treatment in its programs or activities on the basis of race, color, gender, national origin, religion, disability, handicap, age, Vietnam or other veteran status, sexual orientation or any other status protected by relevant law. To arrange for TDD/TTY, auxiliary aids and foreign language interpretation services, call the Patient Representative department at 312-926-3112, TDD number 312-926-6363. Issues related to the Rehabilitation Act of 1973 should be directed to the director of Employee Relations or designee at 312-926-7297.

Developed by: The IVC Filter Clinic and Department of Interventional Radiology

© April 2010 Northwestern Memorial Hospital

For more information about Northwestern Memorial Hospital, please visit www.nmh.org.

1100-07

900914 (04/10)