

#### **PATIENT & CAREGIVER EDUCATION**

# **About Your Inferior Vena Cava (IVC) Filter Placement**

This information will help you get ready for your inferior vena cava (IVC) filter placement by the Interventional Radiology Department at Memorial Sloan Kettering (MSK).

## **About Your IVC Filter**

The inferior vena cava is the largest vein in your body. It carries blood from your lower body to your heart and lungs.

Inferior vena cava

A blood clot in a vein below your heart blocks your normal blood flow and may cause swelling, redness, and pain in the area. Blood clots are treated with blood thinners but some people may not be able to receive this treatment. In those cases, an IVC filter

may be placed

An IVC filter is a small device that is placed in your inferior vena cava to prevent blood clots from moving through your blood into your lungs (see Figure 1).

Your IVC filter will be placed by your interventional radiologist. An interventional radiologist is a doctor who specializes in image-guided procedures. They will place the IVC filter in your inferior vena cave by going through a vein in your neck or groin. Your doctor will position the IVC filter in the vein using a fluoroscopy (real-time x-rays).

Figure 1. IVC filter

The procedure will take about 30 minutes, but you should expect to be in the procedure room for about an

hour. You'll have a follow-up appointment 4 to 6 weeks after placement to see when your IVC filter can be removed.

### **Before Your Procedure**

## Ask about your medicines

You may need to stop taking some of your usual medicines before your procedure. Talk with your healthcare provider about which medicines are safe for you to stop taking.

We've included some common examples below, but there are others. **Make** sure your care team knows all the prescription and over-the-counter medicines you take. A prescription medicine is one you can only get with a prescription from a healthcare provider. An over-the-counter medicine is one you can buy without a prescription.



It is very important to take your medicines the right way in the days leading up to your procedure. If you don't, we may need to cancel your procedure.

## **Blood thinners (anticoagulants)**

A blood thinner is a medicine that changes the way your blood clots.

If you take a blood thinner, ask the healthcare provider doing your procedure what to do before your procedure. They may tell you to stop taking the medicine a certain number of days before your procedure. This will depend on the type of procedure you're having and the reason you're taking a blood thinner.

Examples of common blood thinners are listed below. There are others, so be sure your care team knows all the medicine you take. **Do not stop** taking your blood thinner without talking with a member of your care team.

• Apixaban (Eliquis®)

• Meloxicam (Mobic®)

- Aspirin
- Celecoxib (Celebrex®)
- Cilostazol (Pletal®)
- Clopidogrel (Plavix®)
- Dabigatran (Pradaxa®)
- Dalteparin (Fragmin®)
- Dipyridamole (Persantine®)
- Edoxaban (Savaysa®)
- Enoxaparin (Lovenox®)
- Fondaparinux (Arixtra®)
- Heparin (shot under your skin)

- Nonsteroidal anti-inflammatory drugs (NSAIDs), such as ibuprofen (Advil®, Motrin®) and naproxen (Aleve®)
- Pentoxifylline (Trental®)
- Prasugrel (Effient®)
- Rivaroxaban (Xarelto®)
- Sulfasalazine (Azulfidine®, Sulfazine®)
- Ticagrelor (Brilinta®)
- Tinzaparin (Innohep®)
- Warfarin (Jantoven®, Coumadin®)

Read *How To Check if a Medicine or Supplement Has Aspirin, Other NSAIDs, Vitamin E, or Fish Oil* (www.mskcc.org/pe/check-med-supplement). It has information about medicines you must avoid before your procedure.

#### **Diabetes medicines**

If you take insulin or other diabetes medicines, ask the healthcare provider who prescribes it what to do before your procedure. You may need to stop taking it or take a different dose (amount) than usual. You may also need to follow different eating and drinking instructions before your procedure. Follow your healthcare provider's instructions.

Your care team will check your blood sugar levels during your procedure.

#### **Diuretics (water pills)**

A diuretic is a medicine that helps control fluid buildup in your body. Hydrochlorothiazide (Microzide®) and furosemide (Lasix®) are examples of diuretics.

If you take a diuretic, ask the healthcare provider doing your procedure what to do before your procedure. You may need to stop taking it the day of your procedure.

#### **Contrast dye**

Contrast is a special dye that makes it easier for your doctor to see differences in your internal organs. This procedure is usually done with contrast. If you've had a reaction to contrast in the past, tell your healthcare provider.

If you're breastfeeding, you may choose to continue after your procedure with contrast. If you have questions or would like to discuss contrast and breastfeeding, talk with your radiologist on the day of your procedure.

## Take devices off your skin

You may wear certain devices on your skin. Before your scan or procedure, device makers recommend you take off your:

- Continuous glucose monitor (CGM)
- Insulin pump

Talk with your healthcare provider about scheduling your appointment closer to the date you need to change your device. Make sure you have an extra device with you to put on after your scan or procedure.

You may not be sure how to manage your glucose while your device is off. If so, before your appointment, talk with the healthcare provider who manages your diabetes care.

## Arrange for someone to take you home

You must have a responsible care partner take you home after your procedure. A responsible care partner is someone who can help you get home safely. They should be able to contact your care team if they have any concerns. Make sure to plan this before the day of your procedure.

If you don't have a responsible care partner to take you home, call one of the agencies below. They'll send someone to go home with you. There's a charge for this service, and you'll need to provide transportation. It's OK to use a taxi or car service, but you still need a responsible care partner with you.

#### **Agencies in New York**

VNS Health: 888-735-8913

Caring People: 877-227-4649

#### **Agencies in New Jersey**

Caring People: 877-227-4649

## Tell us if you're sick

If you get sick (including having a fever, cold, sore throat, or flu) before your procedure, call your IR doctor. You can reach them Monday through Friday from 9 a.m. to 5 p.m.

After 5 p.m., during the weekend, and on holidays, call 212-639-2000. Ask for the Interventional Radiology fellow on call.

## Note the time of your appointment

A staff member will call you 2 business days before your procedure. If your procedure is scheduled for a Monday, they'll call you on the Thursday before. They'll tell you what time to get to the hospital for your procedure. They will also remind you where to go.

Use this area to write down the date, time, and location of your	
ocedure:	

If you don't get a call by noon (12 p.m.) on the business day before your procedure, call 646-677-7001. If you need to cancel your procedure for any reason, call the healthcare provider who scheduled it for you.

# The Day Before Your Procedure

## Instructions for eating

Stop eating at midnight (12 a.m.) the night before your surgery. This includes hard candy and gum.

If your healthcare provider told you to stop eating earlier than midnight, follow their instructions. Some people need to fast (not eat) for longer before their surgery.

## The Day of Your Procedure

## Instructions for drinking

Between midnight (12 a.m.) and 2 hours before your arrival time, only drink the liquids on the list below. Do not eat or drink anything else. Stop drinking 2 hours before your arrival time.

- Water.
- Clear apple juice, clear grape juice, or clear cranberry juice.
- Gatorade or Powerade.
- Black coffee or plain tea. It's OK to add sugar. Do not add anything else.
  - Do not add any amount of any type of milk or creamer. This includes plant-based milks and creamers.
  - Do not add honey.
  - Do not add flavored syrup.

If you have diabetes, pay attention to the amount of sugar in these drinks. It will be easier to control your blood sugar levels if you include sugar-free, low-sugar, or no added sugar versions of these drinks.

It's helpful to stay hydrated before surgery, so drink if you are thirsty. Do not drink more than you need. You will get intravenous (IV) fluids during your surgery.



Stop drinking 2 hours before your arrival time. This includes water.

## Things to remember

- Take only the medications your doctor told you to take the morning of your procedure. Take them with a few sips of water.
- Don't apply cream or petroleum jelly (Vaseline®). You can use deodorant and moisturizers. Don't wear eye make-up.
- Remove any jewelry, including body piercings.
- Leave all valuables, such as credit cards and jewelry, at home.
- If you wear contact lenses, wear your glasses instead, if possible. If you don't have glasses, please bring a case for your contacts.
- Wear loose, comfortable clothing.

## What to bring with you

- A list of the medications you take at home.
- Medications for breathing problems (such as inhalers), and medications for chest pain, if you take any.
- A case for your glasses or contacts.
- Your Health Care Proxy form, if you have completed one.
- If you use a CPAP or BiPAP machine to sleep at night, please bring your machine with you, if possible. If you can't bring your machine with you, we will give you one to use while you're in the hospital.
- A small pillow or towel to make you feel more comfortable on your way home from the hospital.

# What to expect

Once you arrive, doctors, nurses, and other staff members will ask you to state and spell your name and date of birth many times. This is for your safety. People with the same or similar names may be having procedures on the same day.

After changing into a hospital gown, you'll meet your nurse. They will place an intravenous (IV) catheter into a vein, usually in your hand or arm. At first, you'll receive fluids through the IV, but it will be used later to give you medication to make you sleepy and more relaxed during your procedure.

Your doctor will explain the procedure, and answer any questions you have. They will also ask you to sign a consent form (a form that says you agree to the procedure and understand the risks).

You'll be brought into the procedure room and helped onto the table. You'll lie flat on your back. The skin around your insertion site (your neck or groin) will be cleaned and covered with a drape. You'll get an injection (shot) to numb the site. Your interventional radiologist will place the IVC filter through a small incision (surgical cut) made in your insertion site.

When the procedure is finished, the site will be cleaned and covered with a bandage.

## **After Your Procedure**

#### In the recovery room

You'll be taken to the recovery room or hospital bed. Your nurse will explain your discharge instructions to you and your caregiver before you go home. They'll also give you a wallet card with information about your IVC filter to keep with you.

Wearing a seatbelt may put pressure on your incisions. You may want to place small pillow or folded towel between the strap and your body when you go home.

#### At home

## **Caring for yourself**

- Leave the bandage on the insertion site for 24 hours. After 24 hours, you can take it off.
- Your incision may feel sore. This should get better within a day or 2. You can take over-the-counter pain medication, such as acetaminophen (Tylenol®) or ibuprofen (Advil®), if you need it.
- You can shower 24 hours after your procedure.

#### **Activities**

- For the first few days, you should avoid certain activities, such as exercises that involve stretching.
- You can still have a magnetic resonance imaging (MRI) while you have an IVC filter, but it's important to tell the healthcare provider at the radiology facility each time to be safe. Show them the wallet card your nurse gave to you.
- Your IVC filter won't set off metal detectors.

# Follow-Up Appointment

- You'll have a follow-up appointment with your interventional radiologist about 4 to 6 weeks after your procedure. During this appointment, your doctor will determine whether your IVC filter will be removed.
- After your procedure, call your doctor in Interventional Radiology to schedule an appointment.

### When to Call Your Healthcare Provider

Call your healthcare provider if you have any of the following:

- A fever of 100.4° F (38° C) or higher
- Pain around your insertion site that doesn't go away after taking

#### medication

- Drainage around the incision site
- Redness and swelling around your insertion site

If you have questions or concerns, contact your healthcare provider. A member of your care team will answer Monday through Friday from 9 a.m. to 5 p.m. Outside those hours, you can leave a message or talk with another MSK provider. There is always a doctor or nurse on call. If you're not sure how to reach your healthcare provider, call 212-639-2000.

For more resources, visit www.mskcc.org/pe to search our virtual library.

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