

Procedures/Diagnostic Tests: Interventional Radiology

Foreign body or catheter retrieval

You are scheduled for foreign body or catheter retrieval using fluoroscopy (“real time” x-ray). It is done to remove a filter or stent that was previously placed, or to take out a piece of catheter that stayed in your body after the catheter was removed. The procedure will be performed by an interventional radiologist, a doctor specially trained for this type of radiology procedure.

The radiologist will use ultrasound and fluoroscopy (real-time X-ray) to help him or her see the location of the catheter in your blood vessel.

This procedure is called “minimally invasive” because the doctor will use small, spaghetti-like tubes (catheters) and wires—it is not surgery. The doctor will insert a catheter into one of your veins. Then, the doctor will thread a fine wire through the catheter to “capture” or grasp the object. Once the object is captured, the catheter and wire will be removed.

Potential complications include bleeding, infection, or pain.

Preparation

- Please have your physician or health care practitioner perform or place orders for:
 - A history and physical (“H & P”) to be written no more than 30 days before the procedure
 - Blood work including a complete blood count (CBC), acute care panel, and blood clotting tests (“coags”) within 7 days of the procedure
- If you take aspirin, ibuprofen (Motrin), naproxen (Aleve) or blood thinning medicines, ask your physician at least a week before the procedure if you should continue taking them.
- Please do not eat anything after midnight.
- You may drink a sip of clear liquids such as water, clear tea, or black coffee up to 2 hours before your procedure, *but please ask your physician how much you may drink.*
- Please ask your physician if you should take your regular medications at their usual time with a sip of water, before your procedure.

During the procedure, the radiologist may give you contrast dye through an intravenous catheter. This dye helps the radiologist see your blood vessels on x-rays so that he or she can place the catheter.

If you are allergic to I.V. contrast, you may need to take some medications before the procedure. These medications will enable you to receive the I.V. contrast safely. Your doctor will probably ask you to take these medications several times during the day before the procedure, often starting 13 hours before the procedure.

You may be asked to take these medications on one of these schedules:

- Prednisone by mouth, 13 hours before the procedure

- Prednisone by mouth, 7 hours before the procedure plus prednisone and benadryl (diphenhydramine) by mouth 1 hour before the procedure

Note for patients with diabetes: If you take a medication for diabetes made with metformin, you must stop this medication for 48 hours **after** the procedure, and have a BUN/creatinine (blood work) to assess your kidney function BEFORE restarting this medicine. Your doctor will talk to you about the need to take other diabetes medications.

Immediately before the procedure

When you arrive in Interventional Radiology, the radiologist and nurse will discuss the procedure with you and answer your questions. When you understand what will happen, you will be asked to sign a consent form giving us permission to perform the procedure. You will then change into a hospital gown (if you do not already wear one).

Procedure

Any procedure where the skin is broken has a small risk of infection or bleeding. We clean the site with antiseptic soap and cover you with sterile sheets. To reduce the risk of infection, please do not move or touch these sterile sheets.

- Your nurse and/or interventional radiology technologist applies monitors to assess your vital signs (heart rhythm, breathing, and blood pressure).
- Your nurse may start an intravenous line (I.V.), if you do not already have one.
- The skin around the vein in your groin (femoral vein) and the vein on the right side of your neck (jugular) will be cleansed and draped with sterile sheets.
- The interventional radiologist will numb these areas.
- You will receive local anesthesia (numbing medicine) where the catheter will be inserted. You may receive moderate sedation through your I.V. to keep you comfortable and relaxed. Your nurse will monitor you throughout the procedure.
- The doctor threads a small tube through the catheter into the vein where the object is to capture it.
- After the retrieval, the catheter is removed and pressure is applied to the site until bleeding stops (usually about 5 minutes) and a small dressing is placed.
- Depending on the difficulty of the retrieval, the procedure usually lasts 1 to 2 hours (or slightly more).

After the procedure

Today

- You will be returned to your room on a stretcher with a small bandage where the catheter was inserted.
- You will stay on bed rest for 2 to 4 hours after your procedure.
- Your nurse will frequently check the site for bleeding, swelling, and pain.
- Do not bend your groin for 2 hours if the femoral vein was used for the procedure. If your neck (jugular) vein was used, you will rest sitting up in bed.
- If you need to cough, sneeze, or lift up your head, please hold the insertion site using firm pressure with the palm of your hand.
- If you notice bleeding, hold firm pressure with your palm on the site and call your nurse immediately.
- If you received I.V. contrast, drink fluids to clear the contrast dye from your body. Please start drinking as soon as your nurse says that's okay, even while you are lying flat in bed.
- Rest today and limit your physical activity.

- If you received sedation, you may feel drowsy or sleepy for several hours after the procedure.
- Slowly resume your regular diet, unless your primary care team tells you otherwise.
- Rest and limit your physical activity (no running, lifting weights or gym workouts) for 2 days unless otherwise directed by your primary care team.
- You may remove your bandage.
- You may shower.
- If you received sedation or anesthesia, do not drive a car, operate machinery, make legal/important decisions or drink alcoholic beverages for at least 24 hours or as directed by your primary care team.
- Ask your doctor when you should resume taking aspirin, ibuprofen (Motrin), naproxen (Aleve) or blood thinners (anticoagulants).

For the next 2 days

Lift nothing over 10 pounds unless otherwise directed by your primary care team.

Special instructions

Please call your clinic or physician if you have any of the following symptoms in the next 24 /48 hours.

- Fever/chills over 38.5 C or 101F, or as directed by your primary care team.
- Increasing redness, bleeding or swelling at the insertion site.
- Increasing or severe pain.
- Weakness, dizziness or feeling faint.
- Shortness of breath or difficulty breathing.

If you have any symptoms you feel are significant or severe, and cannot contact your NIH physician, call 911 or go to your nearest hospital emergency room. If possible, bring this sheet with you and give it to the emergency room staff.

NIH Clinic/Physician _____ Phone _____

This information is prepared specifically for persons taking part in clinical research at the National Institutes of Health Clinical Center and may not apply to patients elsewhere. If you have questions about the information presented here, talk to a member of your health care team.

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 Questions about the Clinical Center?
<http://www.cc.nih.gov/comments.shtml>
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