About Your Hepatic Embolization

This information will help you get ready for your hepatic embolization procedure at Memorial Sloan Kettering (MSK).

A hepatic embolization stops the blood flow to liver tumors. The hepatic artery is the main source of blood for most liver tumors. During your hepatic embolization, your doctor will thread a small catheter (thin flexible tube) in your hepatic artery. Then, they will inject tiny particles in the catheter. These particles will block the blood flow to the tumor, which will kill it.

Your hepatic embolization will be done by an interventional radiologist. An interventional radiologist is a doctor who specializes in image-guided procedures.

Contrast Dye

Contrast is a special dye that makes it easier for your doctor to see differences in your internal organs. The contrast material will be injected into a vein in your arm or hand during your hepatic embolization.

If you’ve had an allergic reaction to contrast in the past, tell your doctor or nurse. You may need to take medication before your
procedure to help with the allergy.

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

**Ask about your medications**

You may need to stop taking some of your medications before your procedure. Talk with your doctor about which medications are safe for you to stop taking. We have included some common examples below.

**Anticoagulants (blood thinners)**

If you take a blood thinner (medication that affects the way your blood clots), ask the doctor performing your procedure what to do. Their contact information is listed at the end of this resource. Whether they recommend you stop taking the medication depends on the reason you’re taking it.

**Do not stop taking your blood thinner medication without talking with your doctor.**

<table>
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<tr>
<th>Examples of Blood Thinners</th>
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<tbody>
<tr>
<td>apixaban (Eliquis®)</td>
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<tr>
<td>dalteparin (Fragmin®)</td>
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<tr>
<td>meloxicam (Mobic®)</td>
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<td>ticagrelor (Brilinta®)</td>
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<tr>
<td>aspirin</td>
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<tr>
<td>dipyridamole (Persantine®)</td>
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<tr>
<td>nonsteroidal anti-inflammatory drugs</td>
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<td>tinzaparin (Innohep®)</td>
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(NSAIDs) such as ibuprofen (Advil®) or naproxen (Aleve®)

<table>
<thead>
<tr>
<th>Drug</th>
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<tr>
<td>celecoxib (Celebrex®)</td>
<td>edoxaban (Savaysa®)</td>
<td>pentoxifylline (Trental®)</td>
<td>warfarin (Coumadin®)</td>
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<td>cilostazol (Pletal®)</td>
<td>enoxaparin (Lovenox®)</td>
<td>prasugrel (Effient®)</td>
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<td>clopidogrel (Plavix®)</td>
<td>Fondaparinux (Arixtra®)</td>
<td>rivaroxaban (Xarelto®)</td>
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<tr>
<td>dabigatran (Pradaxa®)</td>
<td>heparin (shot under your skin)</td>
<td>sulfasalazine (Azulfidine®, Sulfazine®)</td>
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Please read our resource *Common Medications Containing Aspirin and Other Nonsteroidal Anti-inflammatory Drugs (NSAIDs)* ([www.mskcc.org/pe/common_meds](http://www.mskcc.org/pe/common_meds)). It has important information about medications you’ll need to avoid before your procedure and what medications you can take instead.

**Medications for diabetes**

If you take insulin or other medications for diabetes, ask the doctor who prescribes the medication what you should do the morning of your procedure. You may need to change the dose before your procedure.

**Diuretics (water pills)**

If you take any diuretics (medications that make you urinate more often), ask the doctor performing your procedure what to
do. You may need to stop taking them the day of your procedure. Diuretics are sometimes called water pills. Some examples are furosemide (Lasix®) and hydrochlorothiazide.

**Tell us if you’re sick**

If you develop any illness (fever, cold, sore throat, or flu) before your procedure, please call a nurse in Interventional Radiology at 212-639-2236. A nurse is available Monday through Friday from 9:00 AM to 5:00 PM. After 5:00 PM, during the weekend, and on holidays, call 212-639-2000 and ask for the Interventional Radiology fellow on call.

If you have an allergy to contrast, take this time to note when you need to start taking the medications your doctor instructed you to take. Take your first dose 10 hours before your scheduled arrival time.

**Note the time of your appointment**

A staff member from Interventional Radiology will call you 2 business days before your procedure. If your procedure is scheduled on a Monday, you will be called on the Thursday before. The staff member will tell you what time you should arrive at the hospital for your procedure. They will also tell you where to go for your procedure. If you don’t receive a call by noon the business day before your procedure, please call 212-639-5051.

**Use this area to write down the date, time, and location of your procedure:**
If you need to cancel your procedure for any reason, call the doctor who scheduled it for you.

The Day Before Your Procedure

Medications to prevent allergy to contrast dye
If your doctor told you to take medications to prevent an allergy to contrast, take your first dose 13 hours before your scheduled arrival time.

Instructions for eating and drinking before your procedure

- Do not eat anything after midnight the night before your procedure. This includes hard candy and gum.
- Between midnight and up until 2 hours before your scheduled arrival time, you may drink a total of 12 ounces of water (see figure).
- Starting 2 hours before your scheduled arrival time, do not eat or drink anything. This includes water.

The Day of Your Procedure
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.
- If you’re taking pain medication, take it before your procedure with a few sips of water.
- Don’t use any cream, petroleum jelly (Vaseline®), powder, makeup, perfume, or cologne. You can use deodorant and light moisturizers.
- Don’t wear any metal objects. Remove all jewelry, including body piercings.
- Leave valuables (such as credit cards or jewelry) at home.
- If you wear contact lenses, wear your glasses instead.

What to bring with you

- A list of the medications you take at home, including patches and creams.
- Medications for breathing problems (such as inhalers), medications for chest pain, or both.
- A case for your glasses or contacts.
- Your Health Care Proxy form, if you have completed one.
- If you use a C-Pap or Bi-pap 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.

**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 will meet your nurse. They will place an intravenous (IV) catheter into one of your veins, usually in your hand or arm. At first, you will 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.

**During your procedure**

When it’s time for your procedure, you will be brought into the procedure room. You will be attached to equipment to monitor your heart, breathing, and blood pressure. You will also receive oxygen through a thin tube that rests below your nose.

A member of our clinical team will help position you onto your back. Your groin will be cleaned, shaved, and covered with sterile drapes. A local anesthetic (medication to make you numb) will be injected into the area where your doctor will be working.

Your doctor will thread the catheter through the artery in your groin up to the artery that supplies the blood to your liver. To
make sure the catheter is in the right place, they will do an angiogram. An angiogram is an x-ray test that uses contrast dye to allow your doctor to find your tumor and arteries.

Once your tumor is located, your doctor will inject the particles that block the artery. When the procedure is completed, your doctor will remove the catheter and cover site with a dressing.

**After Your Procedure**

**In the hospital**

After the procedure, you will be brought to the Post Anesthesia Care Unit (PACU). While you’re in the PACU, tell your nurse if your dressing feels wet or warm.

Your nurse will monitor your site for any bleeding. You will need to lie flat on your back in bed with your leg straight for at least 1 hour. Depending on how the hole was closed, you make need to lie like this for up to 4 hours.

Once your anesthesia has worn off, you will be taken to your hospital room. Most people stay in the hospital for 3 days.

**Showering**

- You can shower 24 hours after your procedure. Remove the dressing before you shower. Gently wash the area with soap and water. Pat dry with a clean towel. You may want to place a bandage (Band Aid®) over the area if there is any drainage.
• Don’t swim, sit in a hot tub, or take a bath for 1 week after your procedure.

**Side effects**
After your procedure, you may have:

• A fever of 100.4° F (38 ° C) or higher
• Pain
• Nausea (feeling like you’re going to throw up)
• Vomiting (throwing up)

You will get medication to manage your symptoms, if needed.

**When to Call Your Doctor or Nurse**
Call your doctor or nurse if you have:

• A fever of 100.4° F (38° C) or higher
• Pain, nausea, or vomiting that is uncontrolled or worse than it was before your procedure
• Redness, swelling, or bleeding around the procedure site
• Any symptoms that are worrying you

**IR Contact Information**
If you have any questions or concerns, please call Interventional Radiology at 212-639-2236. You can reach a staff member Monday through Friday from 9:00 AM to 5:00 PM. After 5:00 PM, during the weekend, and on holidays, please call 212-639-2000 and ask for the fellow on call for Interventional Radiology.

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