

Portal Vein Embolization

What is the Portal Vein?

The portal vein is a vein that carries blood from your stomach and intestines to the liver. This vein splits into the left and right portal vein. These veins branch into smaller veins to deliver blood to your liver.

Why a Portal Vein Embolization?

A portal vein embolization may be done before your liver resection surgery to help grow healthy liver. This procedure is done to make sure you have enough liver left to help your body work properly.

What is Portal Vein Embolization?

During the procedure a needle is placed through your skin into your liver. Your doctor will find the blood vessel going to the side of your liver that has the largest part of the tumor. This blood vessel is then filled with particles (embolized) to block the flow of blood to that area of the liver. This will help shrink the side of your liver with the tumor and make the healthy side of your liver grow.

Your liver surgery will be scheduled in 3 to 4 weeks after the portal vein embolization. The surgery will remove the liver with the tumor and the healthy liver that has grown will allow normal liver function.

What should I do to prepare for my procedure?

- Tell your doctor if you take any medicines or supplements that thin your blood or prevent clots. You may need to change these medicines or adjust the amount you take before your procedure is done.

This handout is for informational purposes only. Talk with your doctor or health care team if you have any questions about your care.

Medicines for your heart or blood clots:

- ▶ Aspirin
 - ▶ Clopidogrel, brand name Plavix
 - ▶ Prasugrel, brand name Effient
 - ▶ Ticagrelor, brand name Brilinta
 - ▶ Apixaban, brand name Eliquis
 - ▶ Ticlopidine, brand name Ticlid
 - ▶ Warfarin, brand name Coumadin
 - ▶ Enoxaparin, brand name Lovenox
 - ▶ Dabigatran, brand name Pradaxa
 - ▶ Fondaparinux, brand name Arixtra
 - ▶ Rivaroxaban, brand name Xarelto
 - ▶ Cilostazol, brand name Pletal
 - ▶ Edoxaban, brand name Savaysa
- **If you have a stent, do not stop taking your medicines to prevent clots without first talking to the doctor who put in the stent.** For more information, ask a member of your health care team for the patient education handout on protecting your stent.
 - If you take aspirin or medicines like aspirin for arthritis pain, your doctor may have you take a different medicine in the weeks before your procedure.
 - If your procedure is canceled for any reason, call your doctor because you may need to restart the medicines you take to thin your blood or prevent clots.
 - **Do not** eat anything after midnight the night before your procedure. Unless told otherwise by your doctor, you can have sips of clear liquids (water, apple juice, coffee or tea without milk) until 6 am the day of your procedure.

Medicines for Diabetes

If you take insulin or other medicine for diabetes, ask the healthcare provider who prescribes your medicine, what you should do the morning of your procedure. This includes insulin pumps. Please make sure that you take extra equipment and needed materials to the hospital.

Diuretics (Water Pills)

If you take medicine that makes you urinate, such as diuretics (water pills), ask the healthcare provider doing your procedure if they should be taken on the day of your procedure.

Contrast Dye

Contrast dye is a special dye that is used during your procedure for your provider to see your internal organs. If you have had a reaction to dye in the past, tell your healthcare provider.

Tell us if you are feeling sick or unwell on the day of your procedure.

If you develop a fever, flu, or cold, contact your Interventional Radiology provider. If your procedure is scheduled on a Monday, please call as soon as your symptoms are noticed.

What to bring?

- A list of your home medicines.
- A case for your glasses. If you wear contacts, please wear your glasses instead.
- Leave all valuables, such as money, credit cards, and jewelry at home.

What should I expect on the day of my procedure?

- After you check in a nurse will check your blood work and start an IV.
- A member of your health care team will talk to you about your procedure and answer any questions you may have. You will then be asked to sign a consent form.
- You will be asked if you need to use the bathroom. Once your procedure starts you will not be able to move.
- You will be taken to a procedure room and asked to lie down for the procedure. If you are cold, have pain, or any other discomforts, please tell your nurse.
- Your procedure will take 2 to 3 hours. When your procedure is done, you will be taken to the recovery area. Your nurse will watch you to make sure your pulse, blood pressure, and oxygen levels are good and that you have no bleeding from the needle site.

What should I expect after my procedure?

- After recovery, your nurse will take you to your hospital room and help you get comfortable. Tell your nurse if you are in pain or need any medicine.
- **Use your call button to ask for help before you try to get out of bed or out of a chair.** You will be given medicine that could make you dizzy, so it is important to ask for help when you move around.
- You will be able to eat and drink, but do so slowly. Some of the medicines you will be given could make your stomach upset. Do not take pills on an empty stomach. Your nurse can get you something to eat before you take your pills.
- You may be discharged after the procedure or stay in the hospital overnight.
- You may have pain in your right side, your abdomen, your back, or in your right shoulder. Your doctor will order a medicine that you can take for pain. The first 3 to 5 days are usually the most uncomfortable after your procedure.
- You may also have a fever after your procedure. You may take up to 2000 mg each day of acetaminophen (Tylenol) or ibuprofen (Advil, Motrin).

You must have a someone present to drive you home. You will not be able to drive.

When should I call the doctor?

If you have any questions or concerns, please call your doctor's office. The phones are answered 24 hours per day. If you reach the answering service at night or on the weekend, they will call the doctor, who will then call you back. You should also call the doctor if you have:

- A fever of 100.4 degrees Fahrenheit (38 degrees Celsius) or higher
- Uncontrolled nausea or vomiting
- Pain not controlled with medicine

Follow-up Care

You will have a CT scan 3 to 4 weeks after your procedure. Your liver surgery will be scheduled after the CT scan has been completed.