Portal Vein Embolization

What is portal vein embolization?

Before we can remove the part of your liver that has cancer, we use a procedure called portal vein embolization (PVE) to increase the size of the healthy part of your liver. That part of your liver (liver remnant) will stay in your body after your cancer surgery. A larger liver remnant makes recovery after liver surgery easier and safer.

The liver is different from other organs in your body because it can grow new cells (regenerate). Blocking (embolizing) the blood flowing from the portal vein to the part of your liver that has cancer causes that part to shrink and encourages the healthy part of your liver to grow.

About 6 weeks after your PVE, we will do imaging tests to check whether the healthy part of your liver has grown enough to remove the cancerous portion.

How is the procedure done?

A tube will be placed through your liver directly into the portal vein either from your side or the front of your abdomen. A contrast dye is put in the tube to help the doctor see where to place the particles or coils that will block the vein. You will be sedated for the procedure.

Most patients stay in the hospital overnight after the procedure. You will need to lie flat for 4 hours to let the insertion site heal.

The morning after the procedure the interventional oncologist and your liver doctor will check you to see if you are ready to go home. In order to be discharged, your pain must be controlled by oral pain medicine and you must be able to drink plenty of fluids.

Liver anatomy.

(continued)
What can I expect after the procedure?

- You will have some pain and we will give you a prescription for pain medicine to help.
- You can take your regular medicines (except Metformin) right away, unless your doctor tells you otherwise. If you take Metformin, do not take it for 48 hours after the PVE.
- You will be more tired than usual for 1 to 2 weeks after the procedure.
- Most people can return to their normal activities within 1 week after the procedure.

Follow-up

Your liver doctor will schedule your follow-up imaging tests about 6 weeks after the PVE. If you do not hear from your liver doctor within a week, give them a call to schedule this appointment.

Call your liver doctor right away if you have:

- a temperature higher than 101°F (38.3°C) or chills
- pain that does not get better with the prescription pain medicine
- pain that suddenly gets worse or changes in any other way
- nausea so severe you cannot keep down any food or fluids
- bleeding or swelling at the insertion site.

Who can I contact with questions?

For any problems, concerns, or questions, call Interventional Oncology at (615) 343-9206.

After hours (between 3:30 p.m. and 7:00 a.m. on weekdays, and on weekends and holidays), call (615) 322-5000. Ask for the Interventional Radiology Fellow on call.

If you have an emergency, go to the nearest Emergency Room or call 9-1-1.