Portal Vein Embolization

When planning to remove a large part of the liver, it is important to make sure enough liver is left to support the function of the body. A portal vein embolization may be done before a liver resection surgery to help grow healthy liver. This procedure is done if there is a concern that there might not be enough healthy liver remaining after the surgery.

What is Portal Vein Embolization?

A portal vein embolization is done in the Interventional Radiology Department by a doctor called an Interventional Radiologist. During the procedure a needle is placed through the skin into the liver. The doctor will find the blood vessel going to the side of the 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 the liver with the tumor and make the healthy side of the liver grow.

What should you do to prepare for the procedure?

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

- If your surgery or procedure is cancelled for any reason, call your doctor because you may need to restart the medicines you take to thin your blood or prevent clots.

- The night before the procedure, do not eat anything after midnight. You may have sips of clear liquids (water, apple juice, coffee or tea without milk) until 6 am, unless you have been told by your doctor to limit fluids.
What should you expect on the day of your procedure?

- You will be told when your scheduled admission date is and where to check in when you get to the hospital. After you check in, you will be taken to a room in The James Cancer Hospital where you will be prepared for the procedure. A nurse will check your blood work and start an IV.

- When everything is ready, you will be taken to the procedure area. The procedure will be explained to you and you will be given a chance to ask questions. You will then be asked to sign a consent form.

- You will need to lie still for a long time, so make sure you go to the bathroom before you are taken to the procedure room.

- When it is time, you will be taken to a procedure room. You will be placed on a table for the procedure. If you are cold, have pain, or any other discomforts, please tell the nurse.

- When the procedure is done, you will be taken to the recovery area and watched for a short time to make sure your pulse, blood pressure, and oxygen levels are stable and that you have no bleeding from the needle site. You will then be taken to your room at The James.

What should you expect after your procedure?

- When you return to your room the nurse will help you get comfortable in your bed. 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 or less coordinated, so it is important to have someone help you when you first begin to 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 feel sick. Do not take pills on an empty stomach. The nurse can get you crackers or something to eat before you take your pills.

- You will stay in the hospital overnight to make sure you are able to drink plenty of fluids and take your medicine. Your blood work will be checked in the morning. If it is okay, you will be allowed to leave the hospital.
• You may have pain in your right side, your abdomen, your back, or in your right shoulder. You will be given a prescription for pain medicine. Take the pain medicine if you need it. The first 3 to 5 days are usually the most uncomfortable after the procedure.

• You may also have a fever during this time. You may take up to 2000 mg per day of acetaminophen (Tylenol) or ibuprofen (Advil, Motrin) if needed for a fever.

• After several weeks, the healthy liver should have grown to the point where there is now enough liver to do a liver resection surgery.

• Four to six weeks after your embolization, your doctor will do a CT scan or MRI to determine when it is safe to do surgery.

**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 contact your doctor or the doctor who is on call and have them call you back.