Chemoembolization for Liver Cancer

Chemoembolization is a way to treat cancer in the liver. It can be used for cancer that began in the liver. Or it can be used for cancer that has spread (metastasized) to the liver from other parts of the body. The procedure treats only cancer in the liver. It is done by a specially trained doctor. The doctor is called an interventional oncologist.

How Chemoembolization Works

A tumor needs a supply of blood to grow. The hepatic artery is a large blood vessel. It sends blood to the liver. As a tumor grows, it gets most of its blood from this artery. During the procedure, chemotherapy medications are put into the artery. It is then blocked off. This makes sure the medications stay in the liver. And it cuts off blood to the tumor.

The Goals of Chemoembolization

- Blocking the tumor's blood flow so it receives no oxygen or nutrients
- Delivering high doses of chemotherapy medications directly to the tumor site
- Keeping chemotherapy medications in the tumor for long periods of time
- Reducing side effects to the rest of the body because the medications do not leave the liver

Preparing for the Procedure

- Do not eat or drink anything for 6 hours before the procedure.
- Tell your healthcare provider what medications you take (including Coumadin or other blood thinners, and insulin) and ask if you should stop taking them before the procedure.

During the Procedure

When you arrive for the procedure, an IV (intravenous) line will be put into your arm. This line will give you fluids and medications to prepare your body for the procedure. To begin the procedure:

- You will be given medication to help you relax and for pain.
- A small catheter (long, flexible tube) is placed into an artery in your groin.
- Contrast medium (x-ray dye) is injected through the catheter. This helps the artery and catheter show up better on x-rays. The movement of the catheter can then be watched on a video monitor.
- The catheter is guided to the hepatic artery in the liver and moved to the tumor.
The chemoembolization medications are injected through the catheter. A substance that blocks the artery is then injected. The catheter is removed. A closure device is used to plug the artery. You will lay flat for 2 hours to prevent the artery from bleeding.

After the Procedure
- You will stay in the hospital overnight so we can watch to be sure you are recovering okay.
- The morning after the procedure, the interventional oncologist and your liver doctor will evaluate you for discharge. To be discharged, your pain should be under control by taking oral pain medicine and you must be able to drink plenty of fluids.
- You should hear from your liver doctor’s office within about a week after the procedure to schedule a follow-up appointment. If you do not hear from them, give them a call.
- After you are discharged from the hospital, you should take your regular medicines, unless we tell you something else. However, if you take Metformin, do not take it for 48 hours after the procedure.

What are the side effects?
All of the following are part of a normal recovery after chemoembolization:

- Pain in the upper, right side of your abdomen for up to a week. The pain may move toward your shoulder and back. We will give you a prescription for pain medicine to help.
- Feeling very tired and worn out for up to 3 weeks after the procedure.
- You may not have an appetite and because of this you may lose weight. It is important to eat, even though you may not feel like it. Eating smaller meals, more often, is a good way to keep from losing weight.
- You may have a temperature of up to 101°F (38.3°C) for up to 2 weeks after the procedure. You may take 200 to 400 mg ibuprofen (Motrin or Advil) every 6 hours, as needed for fever. You should not take ibuprofen if you have a history of bleeding or have been told by a doctor not to take it. You may take 500 mg acetaminophen (Tylenol) every 6 hours, as needed, but do not take more than 4 doses (1600 mg) of acetaminophen a day.
- You may feel sick to your stomach. We will give you a prescription for anti-nausea medicine to help. Drink 6 to 8 glasses of fluids (water is best) every day.
- You may have a bruise or soreness where the catheter went in.

Hair loss and some other symptoms typically related to chemotherapy are not normal for this procedure. Less than 1 person in 100 people who have this procedure experience hair loss.

How active can I be?
- For about 10 days after the procedure, you should not participate in hard activities or heavy exercise.
- Do not lift anything more than 5 pounds for 10 days.
- Most people can return to normal activities with a week.

When to Call
You will leave the hospital with prescriptions for pain for nausea medicines. Call your liver doctor right away if you have:
- a temperature of more than 101°F (38.3°C) or chills
- pain that is not controlled by taking the prescribed pain medicine

- pain that suddenly gets worse or changes in any way
- you are throwing up or your nausea is so bad you cannot keep down any food or fluids
- bleeding or swelling at the catheter entry site
- any questions about your treatment.

For questions, please call Vanderbilt Interventional Oncology at (615) 343-9206.