

Interventional Radiology

Chemoembolization

About the procedure

Chemoembolization is a way of delivering cancer treatment directly to a tumor in the body, most commonly liver tumors. Under x-ray guidance, a small catheter is inserted into an artery in the groin. The catheter's tip is threaded into the artery that supplies blood flow to the tumor. Chemotherapy is injected through the catheter into the tumor and mixed with particles that block (embolize) the flow of blood to the diseased tissue.

Chemoembolization works to attack the cancer in two ways. First, it delivers a very high concentration of chemotherapy directly into the tumor, without exposing the entire body to the effects of those drugs. Second, the procedure cuts off blood supply to the tumor, depriving it of oxygen and nutrients, and trapping the drugs at the tumor site to enable them to be more effective.

Chemoembolization is a treatment, not a cure. About 70 percent of patients will see improvement in the liver.

What happens during the procedure?

The day of the procedure, you will be admitted to the hospital. An IV will be started before the procedure in order to administer medications and sedation during the procedure. There is a nurse and technologist that assist the physician during the procedure.

The radiologist will numb the area of the groin with a local anesthetic. A thin catheter is introduced through a small incision into the femoral artery, and guided by a TV monitor into the arteries feeding the liver. Contrast media is injected so that the radiologist can see the small vessels feeding the liver. The catheter is then guided into these branches of the liver and the chemo material is injected. X-rays are taken to confirm that the tumor has been completely treated.

How long does the procedure take?

The procedure typically takes two hours, although it can go much longer depending on the treatment needs of the patient.

What happens after the procedure?

Once the treatment has been completed, the radiologist will remove the catheter and pressure will be applied to the groin area for a short time to prevent bleeding from the site of the catheter. Expect to stay on bedrest in the hospital for about 6-8 hours.

You will be sent home with prescriptions for oral antibiotics, pain medication, and medication for nausea. Fever may occur for up to one week after the procedure. If your pain suddenly becomes worse or changes in character, or your fever becomes higher, let your physician know immediately.

Patients will return for a CT or MRI scan in about three months to see how much the tumor has shrunk. Chemoembolization may be repeated if a new tumor occurs.

What are the benefits and the risks?

Chemoembolization is most beneficial to patients whose tumor is limited to the liver, but there has also been some limited success with patients whose cancer has spread to other areas of the body.

- Primary Liver Tumor
- Metastatic tumors from colon, pancreas, melanoma, sarcomas, lung.

Risks include:

- Infection
- Allergic reaction to contrast media
- Reactions to chemotherapy, including nausea, hair loss, decrease in white blood cells or platelets, and anemia
- Serious complications occur in about one in twenty procedures. This may include liver failure or liver damage
- Reporting indicates that one in 100 procedures result in death, usually due to liver failure

How do I get the results?

The radiologist will advise you as the success of the procedure once it is completed. Any follow up testing will be scheduled with your regular physician.

How to prepare

- This test is scheduled through our Central Scheduling department 757-6475. The schedulers are available from 8:30 a.m. to 5:00 p.m., Monday through Friday.
- Patients who have had their films at another facility must bring them in by at least one day prior to the procedure so the radiologist can review them.
- Bring the order for the procedure.
- You will need to have someone drive you home after you are released from the hospital post-procedure since you will be receiving sedation.
- Wear comfortable clothing that can be easily removed for the scan, such as loose slacks, sweatpants, tee shirts or sweatshirts.
- Arrive at the hospital 15 minutes before the start of your test if an admitting clerk has registered you over the phone in the day or days prior to your test.
- Park in the hospital parking lot near the Admitting Entrance, and enter through the Admitting doors.
- Report to admitting the day of the procedure.
- You will need to bring with you a picture I.D. for identification and your insurance cards.
- If you have any questions about registration, scheduling, or insurance, contact the admitting department at 757-6217.
- If you have any questions, please call the Catheterization Lab at (219) 757-6158.