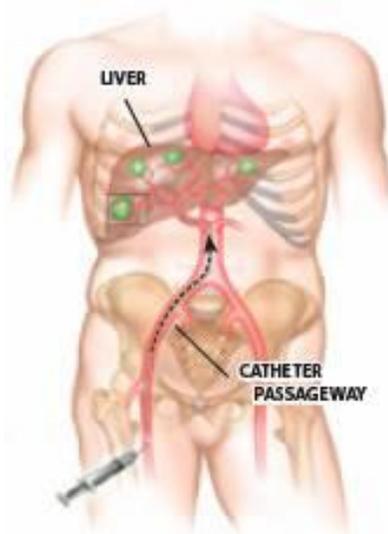


**Interventional Radiology
Patient Discharge Education
Hepatic (Liver) Chemoembolization
Treatment Information**

Chemoembolization therapy is used to treat liver tumors or for post surgical adjunctive treatment. Chemotherapy medicines are injected into the liver through blood vessels, delivering a high local dose of cancer killing medicine directly to the tumor or tumor area. Another material called an embolic agent is also put into the liver's blood vessels which cuts off the blood supply and essentially starves the tumor of the blood they need to survive and grow.



Using x-ray guidance, a small catheter is inserted into an artery, usually in the upper thigh region, and fed up to the liver. Special dye is first injected which allows pictures to be taken and the vessels surrounding the tumor to be visualized. Then the chemotherapy medicine and embolic material are injected into the liver directed at the tumor.

WHO IS A CANDIDATE AND WILL IT HELP ME?

Chemoembolization is used for treatment of primary liver cancer as well as cancer that started in another area of the body but has spread to the liver (metastasized). Your liver doctor along with the Interventional Radiology doctors will determine if this procedure is appropriate and safe for you.

The goal of Chemoembolization is to reduce the size of liver tumors or kill any remaining microscopic tumor cells following surgery. A true cure using this treatment alone is uncommon, but may be used with other treatment options such as surgery, radiation, or systemic chemotherapy. Approximately 70 percent of patients will see improvement in the liver tumors' size. Depending on the type of liver cancer, it may improve survival.

EXPECTED SIDE EFFECTS:

All of the following signs are part of a normal recovery after Chemoembolization. Within a month after the procedure you should be back to your usual self.

- Right upper quadrant abdominal pain for the first few days to week. It may radiate to the shoulder or back. You will be given medicine to help control the pain. This pain usually gets better within the first week.
- Extreme fatigue or tiredness for two to four weeks after the procedure. This is from the liver not working normally as it heals
- A poor appetite which may result in weight loss before your appetite returns – continue to eat even if you have no appetite. Small, frequent meals are the best way to prevent weight loss.
- Fevers up for 101 degrees for one to two weeks after the treatment

Risks: Chemoembolization does have some risks or additional side effects that are not as common. Serious risks are greater if you already have liver or kidney dysfunction. The following are some possible side effects caused by chemoembolization.

Chemo side effects may include one or more of the following:

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|--------------------|------------------------------|
| Allergic Reactions | Decreased Platelets |
| Diarrhea | Anemia (low red blood cells) |
| Nausea | Decreased white cells |
| Hair Loss | |

Embolic side effects may include one or more of the following

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|------------------------------|--------------------------|
| Abdominal bloating | Infection |
| Gallbladder damage | Nausea and vomiting |
| Confusion | Pneumonia |
| Fever | Temporary kidney damage |
| Fluid in the abdomen or lung | Worsening liver function |

Benefits:

- In about two-thirds of cases, Chemoembolization can stop liver tumors from growing or cause them to shrink. This lasts for an average of 10 to 14 months, depending on the type of tumor.
- The procedure can be repeated
- No large incisions, only a small scar on the upper thigh
- Fewer side effects than systemic chemotherapy

CHEMOEMBOLIZATION: Preparing for the Procedure

The Week Before:

- Do not take any aspirin or ibuprofen (Advil/Motrin) 5 days before the procedure. If you have been told to take an aspirin daily, do not stop without first discussing with the prescriber (i.e. cardiologist or primary care provider). When Interventional Radiology calls to schedule your procedure, let the nurse know about your medications.
- Updated labs will be needed 1-3 weeks before the procedure, depending on how stable your liver function is. The Interventional Radiology RN Coordinator who schedules your treatment will tell you whether you need updated labs drawn.

The Night Before:

- Locate or create a list of your current medications as well as any allergies, bring this with you to the hospital. Do not bring your actual medications to the hospital, they will all be provided for you.
- You will be staying the night after your procedure so you may want to pack a bag with non-valuable personal belongings to help the hospital stay be more comfortable. An overnight stay is required to observe you and manage any pain or nausea you may have. There are no exceptions.
- Someone will need to drive you home the following morning after discharge, usually by about 10:00 am
- Nothing to eat or drink after midnight the night before
- You may take a sleeping pill if they are prescribed to you

Day of the Procedure:

- You may take your normal medications the morning of the procedure with a sip of water, but please run them by your nurse coordinator when scheduling to determine whether it is safe to take them
- Do not wear contact lenses, however you may wear glasses. Leave jewelry and any valuables either at home or with whoever is taking you to the hospital.
- Arrive to the Advanced Medicine Center (cancer center) when instructed. If you are late, please call to inform us and we will tell you if you need to reschedule.
- You will be asked to change into a hospital gown, and will have an IV placed. The IV is necessary to give you pain medicine and fluids as well as other medications during and after the procedure.

During the Procedure:

Medicines will be given through your IV to prevent pain and help you relax, though you will not be put to sleep during the procedure. This is called conscious sedation. Many patients sleep through the procedure.

- Most patients only feel a burning sensation in the groin where the catheter will be inserted. This is local anesthetic similar to what is used at the dentist. Following this, all you should feel following that is slight pressure. The treatment takes about 2 to 3 hours
- If you are uncomfortable or have abdominal pain during the procedure, just tell your nurse or the doctor and they will give you more pain medication.
- You will be asked to hold your breath during certain times of the procedure.

After the Procedure:

- You will stay overnight in an observational unit and be discharged the next morning. This is required to observe you and manage any pain or nausea you may have.
- Because the large artery in your groin was accessed, you must remain flat after the procedure for a minimum of two hours. Do not get out of bed until your nurse tells you it is okay.
- Pain medication and anti-nausea medication will be available to you to keep you comfortable.
- Antibiotics may be ordered depending on your medical history
- Liquids and foods are started slowly to prevent nausea.

Going Home the Next Morning:

****A responsible adult must accompany you home from the hospital. This is a Stanford policy for your safety****

Diet: There are no dietary restrictions specific to this procedure. If you had restrictions prior due to other treatments or diseases such as diabetes, cardiovascular disease, or renal disease, continue with these. Alcohol consumption is not recommended.

Nausea is common following this procedure. Eat light for the first 24 hours and try to stay away from foods that trigger the nausea for you. A prescription for anti-nausea medicine will be given to you.

Activity: Expect to be tired for the first week after the procedure and gradually gaining strength back. Do not plan anything active or requiring your close attention for the first few days following discharge from the hospital. If you work, two weeks rest time should be adequate.

Bathing: It is okay to shower 24 hrs after the procedure. Gently wash the catheter insertion site with soap and water, do not scrub. Do not bathe or soak in water for 3 days following the procedure.

Medications: Usually, your pre-procedure medications do not change. You will be told before discharge if any of your medicines change. The following medications will be prescribed to you upon discharge IN ADDITION to your normal medicines:

1. Protonix (pantoprazole), a stomach acid reducer. Take this every day for 1 month regardless of stomach pain. This is only prescribed for one month. If you would like to continue this medication after one month, please see your liver doctor or primary care doctor.
2. Narcotic pain medicine, usually oxycodone (generic for Percocet). Take if you have pain, but not more frequently than every six hours
 - **Do not drive after taking this medicine, it causes drowsiness
 - **If the bottle says it has Acetaminophen with it, do not take additional Tylenol while taking this medication.
3. Sennakot or Dulcolax (same medicine/different name), prevent or treats constipation. Take this twice a day, morning and night, if you are taking the narcotic pain medicine or are having constipation.
4. Phenergan (promethazine), anti-nausea medicine. Take this if you have nausea, but not more frequently than every 6 hours.

Follow Up:

- We recommend calling your liver doctor/oncologist to set up a follow up appointment after you are discharged from the hospital. Every doctor is different in when they want to see their patients after treatment, but some want to see you as soon as two weeks following.
- Follow up imaging is usually ordered by your liver doctor or oncologist and is done 2-3 months after treatment. The timing of follow up imaging may vary depending on your doctor's preferences.

If you have a question about needing an appointment or test results, please call 650-736-9081

When to Get Medical and Emergency Help:

Call our RN triage line at 650-736-9081:

- If you have a temperature over 101.0°F
- If your pain is not controlled
- Your nausea is so severe you cannot keep down any food or fluids
- You have questions about your treatment or new prescriptions
- You have pain where the catheter was placed that is worsening more than improving
- You have any other symptoms you are concerned about within 2 weeks of treatment

Go to your nearest Emergency Room:

- Your catheter insertion site starts bleeding and will not stop after 10 minutes of firm pressure
- You have shaking chills or a temperature over 102°F

Interventional Radiology Contact Information

Office Hours 8:00 am - 4:30 pm

Post procedure questions and RN Triage:

Phone: **650-736-9081** Fax: 650-736-7734

Email: irprocedure@stanfordmed.org – non urgent concerns only

For all After Hours Urgent/Emergent issues:
Call the Stanford Page Operator: **650-723-6661**
Ask for the **IR MD ON Call** (pager # 27237)