

TheraSphere® Treatment for Liver Cancer

TheraSphere® (radioembolization) is a treatment which is done in the Interventional Radiology Department.

What is TheraSphere® treatment?

TheraSphere® is an outpatient radiation treatment for liver cancer. Your treatment will include reading and signing a special consent form and you will be added to a confidential patient registry. This treatment is safe and offers a likely benefit to patients who are good candidates for the treatment.

The treatment involves injecting a large number of tiny radioactive glass beads (TheraSpheres®) into the liver arteries (the blood vessels that bring oxygen to the liver). The TheraSpheres® travel through the blood vessels until they lodge into the smaller blood vessels of the liver tumor. The beads stay there and give off radiation that destroys the cancer cells with little harm to the healthy liver. After a few days, the beads are no longer radioactive.

Who can get this treatment?

Patients who have the type of cancer that cannot be removed with surgery may be able to receive this treatment. Your health care team will review your health history, recent scans, and your blood work. They will meet with you in clinic to assess and figure out if you are a good candidate. You will need two screening tests before the treatment.

Mapping Angiogram

A mapping angiogram of the liver is a test where we inject x-ray dye into the liver blood vessels to see how the blood flows through the liver. This test will provide a “road map” to help plan for the treatment. Smaller blood vessels may be found that could carry some of the radioactive beads

away from the liver to your stomach and intestine. These small blood vessels may need to be plugged up (embolized) to prevent the beads from going to your stomach and intestine. If TheraSphere® glass beads were to go to your stomach or intestine, you could have bleeding or an ulcer.

Before the angiogram, you will receive IV pain medicine and a sedative. We will choose an artery in your wrist or in your groin as the best artery to go into. We will numb the area over the artery. Then, we will place a small tube in your artery and guide it to your liver blood vessels. We inject dye for an x-ray into the liver blood vessels and take pictures.

We will block small blood vessels that go to the stomach or bowel. Your stomach and intestines get blood from many other blood vessels, so in most cases, it is not a problem to block these small blood vessels.

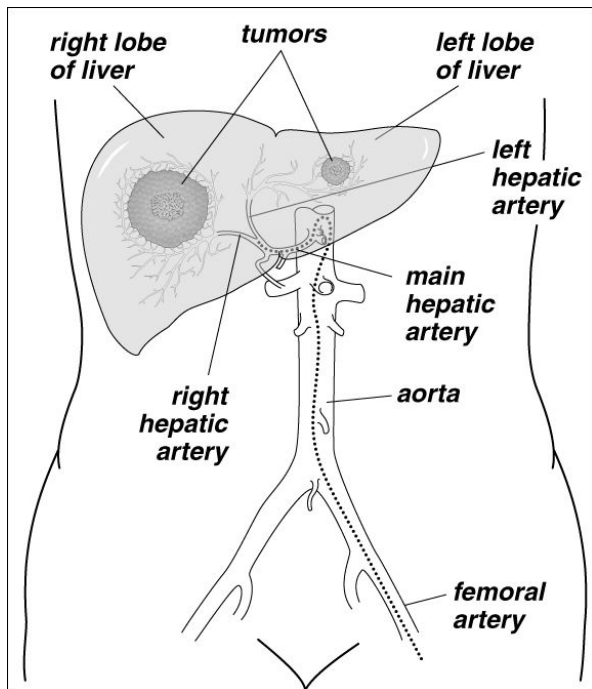
After this test is complete, we will remove the tube in your artery. You will need to lie flat for 2-6 hours to allow the artery puncture site to seal up. You will not be able to drive or do heavy lifting for 24 hours after this test. Your nurse will give you more instructions.

MMA Scan

While you recover from the angiogram of your liver, you will have an MAA scan. This is also called a lung shunting scan. This scan shows how much blood flows around the liver tumors and to your lungs. This scan helps us figure out whether you are a candidate for this treatment. We will place you under a scanner for ½ hour. After this

test we will take you to the recovery area until you are ready to go home.

If these tests show that it is safe for you to have this treatment, you will be set up for the first treatment within the next few weeks. The first treatment will treat liver tumors on one side of your liver. You may need a second treatment if you also have tumors on the other side of your liver or if your tumor is getting blood supply from other areas. Your treatment team will review this with you.



What to Expect During Treatment

Getting ready is the same as for the angiogram test. We will place an IV in your hand or arm to be used for IV pain and sedative medicine. We will place a small tube into your groin or wrist artery and guide it to your liver blood vessels. We use the mapping angiogram as a guide to place the tube in the correct vessels for treatment.

We use x-ray dye to make sure the tube is in the correct place. Then we will inject the

TheraSphere[®] beads. Once this is done, we will remove the tube from the artery, and we will send you to the recovery area.

You will need to lie flat for 2-6 hours to make sure your artery puncture site seals up. You will not be able to drive or do heavy lifting for 24 hours. You will be allowed to go home if you live within about 2 hours of Madison. If you live more than 2 hours away, we will help you arrange a hotel room for that night. Before you leave the hospital, you may have a brief scan to make sure the radioactive beads are in the correct place.

Side Effects

For 2-3 weeks after the treatment, most patients feel tired, have a decreased appetite, and may have a low-grade fever. You can relieve the fever by taking acetaminophen (Tylenol[®]) 325 mg, 1-2 tablets every 4 hours, or ibuprofen (Advil[®]) 200mg, 1-2 tablets, every 6 hours.

Rarely, patients have mild pain for a short time. If you are having pain, we will give you pain medicine to control this.

Future Treatments

If you need more treatment, we will schedule this four to eight weeks after your first treatment. We'll want to make sure that you are not too tired and that your liver function tests are good. Most of the time, you do not need to repeat the "mapping angiogram" before your next treatment.

How Treatment Works

How well the treatment helps depends on the size, number and location of your tumors. We will review that with you when we meet you in our clinic before the treatment. It tends to work best in patients who are good candidates for the treatment.

Home Care

Please look at the list below to avoid problems after your treatment.

Diet:

- **Drink plenty of fluids.** Drink at least eight-8 oz glasses of water, juice, or soda over the next 24 hours after treatment.
- You may eat whatever you like. Patients often tolerate smaller, more frequent meals during the first few days after treatment.
- Do not drink any alcohol for 4 weeks after your treatment. This will give your liver the best chance of healing.

Medicine

- You may restart your scheduled medicine as prescribed.
- You may already be on an anti-ulcer medicine. If you are not, we will give you a dose before the treatment and a prescription for a 30-day supply. Be sure to take this medicine for 30 days after the treatment.
- We will give you prescriptions for pain and nausea medicines after treatment. You do not need to fill and take these medicines if you do not feel you need them.

Site Care

- You may remove the dressing over the artery after 24 hours.
- Do not take a hot bath or shower for at least 24 hours.
- Look at the puncture site daily for 5 days.

Activity

- **No strenuous physical activity of any kind.**
- Do not bend the leg that was used for the treatment more than needed for the next 24 hours.
- Do not lift over 10 pounds for 48 hours.
- Avoid sports, heavy cleaning, and stair climbing for 48 hours.
- No driving for 24 hours, or while taking pain medicine.

Radiation Guidelines

The spheres used for this treatment contain a radioactive substance that takes time to become inactive. This means that for 3 days (72 hours) after your procedure, other people that you are around may be exposed to radiation from your body.

Please follow these simple guidelines:

- No visitors who are pregnant.
- No physical contact or extended travel with others for longer than 2 hours.
- Sleep in bed alone.
- Do not allow children or pets to sit on your lap.
- No special plans for handling bodily fluids such as urine, stool, blood, or vomit.

If you seek medical care somewhere else within 3 months of treatment, please tell your provider that you have had treatment with a radioactive substance. Also, you should not have open abdominal surgery within 3 months after treatment.

When to Call

- Redness, swelling, or drainage at the groin site. Some bruising at the puncture site is normal and will go away in a couple days.
- Increased pain, numbness, coolness, or see blue bruising of the leg or hand where the puncture site is.
- Stomach pain that gets worse over time.
- Bleeding at the puncture site. Put pressure on the site to stop the bleeding and then call the clinic.
- Nausea and vomiting that that you cannot control by medicine or lasts more than 24 hours.
- Fever over 101°F for two readings taken 4 hours apart.
- Questions or concerns.

Who to Call

Interventional Radiology,
Monday-Friday between 8 am-4 pm
**608-263-9729, prompt 3, or
1-800-323-8924.**

After hours this number will give you the paging operator. Ask for interventional radiology resident on call. Give your name and number with the area code. The doctor will call you back.

If you are a patient receiving care at UnityPoint – Meriter, Swedish American or a health system outside of UW Health, please use the phone numbers provided in your discharge instructions for any questions or concerns.

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright 12/2019. University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#6428