



TACE

TACE or Transcatheter Arterial Chemoembolization, is a minimally invasive procedure used to treat tumors of the Liver. It involves gaining catheter access into the arterial system and delivering chemotherapy directly to the blood vessels supplying the tumor. Given this way, we are able to decrease the dose of chemotherapy exposure to healthy parts of the body, while maximizing the dose directed specifically at the tumor. The TACE procedure attacks the tumor in two ways, with chemotherapy and embolization agents that restrict the tumor's blood supply. To help control the cancer growth, you may need to have the TACE treatment done more than once, which will depend on the type of cancer you have, the location, and the size of the tumor(s) in your liver.

Why am I getting this procedure? (Indications)

Reasons you are getting this procedure Include:

- You have a primary liver cancer, which is a cancer that started in the liver.
- You have metastatic cancer, which is cancer that has spread to the liver.

Who shouldn't get this procedure? (Contra-Indications)

You should not have this procedure if you have any of the following:

- Severe anaphylactic allergic reaction to contrast
- Uncorrectable coagulopathy which is a condition where your blood's ability to form clot is impaired
- Severe peripheral vascular disease
- Severe cardiac disease and/or renal insufficiency
- Jaundice

Benefits

- It is a minimally invasive procedure
- There is minimal scarring and minimal risk of infection
- Reduces the size and growth of your tumor
- Relief of symptoms related to your tumor

Risks

- Bruising at the site of the procedure, which will resolve in a few days
- Pain, nausea and flu-like symptoms may occur, and can vary from mild to severe
- Very rarely side effects include:
 - Significant bleeding or blockage of the artery that may require a procedure
 - Infection at area of the liver treated that will require antibiotics
 - Acute liver failure

What to Expect

BEFORE

Do I need to fast for the procedure? Yes. You must stop eating and drinking 6 hours before the procedure.

Do I need to stop any medications? Yes. You must stop any blood thinning medications (Coumadin, Lovenox, Plavix) before the procedure. You will receive instructions depending on what type of medication you are on.

How else can I prepare? You can prepare by bringing in a list of all your medications. You should also make sure you have someone to drive you home after the procedure.

DURING

Duration of procedure: 30 minutes to 2 hours

Level of anesthesia: Conscious sedation, which means you will still be able to talk to the nurse and doctor in the room but will feel very relaxed and may not remember everything related to the procedure.

How is the procedure done?

- The procedure begins with the doctor prepping your upper thigh with sterile soap.
- To identify the side to be prepped, the doctor will feel for your pulse and use ultrasound to confirm the accessibility of your vessels for the procedure. This will require the use of some cold ultrasound gel.
- You will be asked to keep your arms by your side and remain still throughout the procedure. Your nurse will check in with you regularly, ensuring you are comfortable and not experiencing too much pain.
- Once the area is prepped the doctor will use ultrasound to start the procedure.
- The doctor will start by using a small needle with numbing medicine to numb the area of skin that will be used as an access point to the blood vessel. You will initially feel a cooling, burning, or numbing sensation, after which the most common sensation you should experience during the procedure is pressure.
- If at any time you feel an uncomfortable sensation, let the doctor know so he/she can give you some more numbing medicine.
- The doctor will then use another needle to access the large artery running up your thigh, called the common femoral artery.

- Once the needle is inside the artery a very thin wire is inserted into the needle and the needle is removed. The wire will then be used to introduce guide catheters, or thin long tubed instruments, into the artery. The X-ray machine will be used at this point to ensure proper placement of the wire and catheter.
- After this step, the wire and catheter are used to travel up to the arteries supplying the liver.
- All movements are monitored by the doctor looking at live images taken by the X-ray machine.
- At various points during the procedure you will be instructed to take a deep breath in, blow it out, and hold your breath for a few seconds while the doctor takes an image. Your nurse will guide you through these.
- You may feel a warm sensation in your abdomen from the contrast being injected into your arteries when the images are being taken.
- Once the doctor has found their way to the specific blood vessel supplying the tumor in your liver, they will prepare the chemotherapy medicine for delivery.
- The medicine is delivered through the catheter, again under X-ray guidance, and this will take several minutes.
- Once the medication is delivered, imaging will be used to assess that the vessels supplying the tumor have been properly blocked.
- After this, the doctor will end the procedure by removing the wire and catheter from the groin.
- Your doctor will then hold pressure on the access point in the upper thigh for 15-20 minutes to ensure proper clot formation. The access site will be properly cleaned and dressed.

AFTER

Your nurse will wheel you on your bed to the PCU (Procedural Care Unit) to be monitored.

Expected time of discharge: 2 – 6 hours of bed rest then discharge. If this is your first TACE procedure you may be staying in the hospital overnight for continued post-procedural care.

Follow-up: 2 – 4 weeks depending on condition and physician preference. You will likely have an updated CT of your liver performed at this time.

Post-procedural care:

- You may have some mild tenderness, bruising and swelling in the groin area, but the symptoms should go away in a couple of days.
- Change the dressing as needed.
- You will be given prescriptions for pain and anti-nausea by your provider.
- **You may shower, but avoid submerging in water such as bath or swimming for 7 days.**
- If you have any bleeding from the puncture site:
 - Lie down flat with your leg straight
 - Apply direct, constant, firm pressure for 10 to 15 minutes. The bleeding should stop. If it doesn't, maintain pressure and call your doctor immediately or go to the Emergency Room
- Diet:

- Resume your regular diet
 - Drink an extra 3 to 4 glasses of fluid.
- Rest and Activity:
 - Take it easy for the rest of the day.
 - Do not lift anything over 5 pounds for the next 48 hours.
- Call your doctor if:
 - Increasing leg or abdominal pain.
 - Significant leg swelling.
 - Significant shortness of breath.
 - Leg becomes pale, cold, numb, tingling (pins and needles) or turns purple or red.
 - Worsening jaundice
 - Fever, chills, or sweats