General Instructions

You should continue with your usual medications prior to the procedure. You can take them with a small sip of water. If you are on blood thinners, you must tell the doctor’s office before you come for the procedure. If you are currently taking Aspirin you may be asked to stop taking it one week prior to your appointment. If you are a diabetic on insulin or taking oral diabetic medicines you will be given further instructions prior to coming in for the procedure.

What are the risks of the procedure?

All procedures have risks but these can be minimized by closely following instructions.

There can be injury to blood vessels, bleeding or bruising and it is possible to introduce infection into the body any time a needle is used.

There is also the possibility of an allergic reaction to any of the drugs or contrast agent that may be used during the procedure. The most common allergic symptoms are itching or a mild skin rash. Severe side effects are rare but can occur and will be treated as required.

A patient is exposed to radiation as part of the TACE procedure. The radiation is needed to see the arteries and inject the particles. The risk of future adverse events related to the radiation exposure is considered low.

There is a risk of Liver failure due to the liver is already stressed from disease.

The embolization material could migrate to outside of the target area and become lodged elsewhere, which could lead to gallbladder, pancreas or intestinal concerns.

Infection is always a risk following any surgery and can occur following TACE, this is extremely rare. Treatment would require antibiotics.

Post Embolization Syndrome. Some patients experience a mild temperature, elevated white blood cell count and generalized aches and pains following TACE. This is known as Post Embolization Syndrome and usually lasts for 7-10 days after the procedure. It is self limiting.

What are the benefits of the UFE procedure?

The TACE procedure is a minimally invasive treatment for HCC and there is a 50% chance of reduction of size of the treated tumor. The goal of the TACE procedure is the extension of length and quality of life. This procedure does not cure the HCC.

The procedure is less invasive than surgical procedures, which means the TACE procedure uses a non surgical technique that allows minimal damage to the body’s tissues. A faster recovery time (time for the body to repair and return to normal) is expected after the procedure.

Please consult your physician for any questions or discuss trans arterial chemoembolization further.


Trans Arterial ChemoEmbolization (TACE) for Hepatocellular carcinoma

Patient information Sheet
Background

Trans arterial chemoembolization was developed as a treatment option for patients with Liver Tumors. Liver tumors develop into one or more masses which can be difficult to treat due to their location, underlying disease and the spread of tumor. The average life expectancy of an individual with hepatocellular carcinoma (HCC) is 6 months to 2 years. Treatments include medical therapy, surgical resection and minimally invasive treatments such as trans arterial Chemoembolization.

What is the cause of and/or risk factors of Hepatocellular Carcinoma?

Liver cancer (Hepatocellular carcinoma, HCC) is more common in men than women. One or more cancerous tumors develop within liver. The cause of these tumors can be related to damage of the liver from diseases such as hepatitis B or C, auto immune disease, or chronic conditions.¹

What is Trans Arterial Chemoembolization?

The Trans Arterial Chemoembolization procedure is the deposit of an anti cancer treatment into the blood vessel that supplies the tumor. The medication is then trapped in the tumor, by placing a substance (embolic material) in the blood vessel to prevent further blood flow. The anti cancer medication can then work to try and stop or slow the growth of the tumor. The tumor is followed by taking various scans or images of the tumor before and at various times after treatments with the anti cancer medications.

What should I expect?

Prior to the procedure

Prior to the procedure several tests may be done to confirm your diagnosis and that this treatment is appropriate and can be carried out safely. Tests may include: a physical exam and a review of your medical history, blood tests and imaging tests such as a muga scan MRI or CT scan, or possibly a biopsy of the liver tissue. Each patient is looked at individually and tests are ordered as they are required.

Your procedure day

The procedure usually requires overnight stay in hospital. You will be given a date, time and place to arrive at the hospital, you will also be asked to fast (not eat or drink) after midnight the day prior to the procedure. When you arrive at the hospital the diagnostic imaging staff will prepare you for the procedure by starting an intravenous in your arm, which will allow the physician or nurses to give you fluids and medications. You will be given painkillers before the procedure.

You will be brought to the procedure suite. Heart-monitoring (ECG) wires will be attached to your chest and arms. A small sensor is put on a finger to monitor your oxygen level and a blood pressure cuff wrapped around one arm. This is a sterile procedure; the skin over the femoral artery is washed and covered with sterile sheets. Then, local anesthetic is also used to “numb” the skin and muscle. The medical staff will be wearing masks and gowns during the procedure. You will require oxygen which will be given to you via either a mask or nasal prongs during the procedure. Medications will be given through the vein (intravenous) in your arm to help you relax and for pain control. A specially trained interventional radiologist will perform the procedure. A very small tube called a catheter will be inserted into the artery in your groin (femoral artery). The radiologist guides the catheter through the arteries to the blood vessel which supplies the tumor in the liver they are needed to treat. The anti cancer medications are then injected through the catheter into this vessel. To trap the anti cancer medication in the tumor, the radiologist will inject an agent to blood further blood flow to the tumor.

To see the blood flow with the x-rays a dye or contrast must be given through the catheter, which may give you a feeling of warmth when it is injected. The procedure is estimated to take 45-90 minutes. One or more tumors will be treated at each procedure.

After the procedure

After the procedure is finished the catheter will be pulled out and one of the medical staff will press on the artery. You will be transferred to the recovery room for approximately 1 hour. You are then moved to one of the inpatient rooms and will be asked to remain on bed rest lying flat for approximately 4 hours after the procedure to allow your groin site to mend. You may have some post procedure pain and will be instructed on how to control the pain. You should expect to stay in the hospital overnight. The next day the doctor will see you before you go home. You may be given antibiotics to prevent infections after the procedure. You will have a small dressing on your groin that can be removed after 48 hours. Your treatment plan will be outlined before you start your treatments. Your will have imaging scans and blood work to follow your progress.