

## **Brain Tumor Embolization**

### *How to prepare and what to expect*

*This handout explains embolization for a brain tumor. It includes how to prepare, what to expect during the procedure, and self-care at home.*

### **What is a brain tumor embolization?**

An *embolization* is a procedure that blocks or reduces the blood flow to cancer cells. A *brain tumor embolization* blocks off the arteries that supply blood to a tumor in your brain. Surgery to remove the tumor can then be done more quickly and safely.

About half of all brain tumors that get their blood supply from arteries can be embolized.

### **Is this procedure right for me?**

Your surgeon will do an *angiogram* to find out if embolization is right for you. An angiogram is an X-ray study of blood vessels. The study uses *contrast* (X-ray dye) to help the details of your blood vessels show clearly on the X-ray images.

Embolization may not work if:

- The artery that feeds your tumor also supplies blood to healthy parts of your brain
- The artery that feeds your tumor is too small



*The arrow points to a large brain tumor.*

The results of the angiogram will help your surgeon decide if embolization will be helpful in treating your tumor.

### **How do I prepare for embolization?**

- You may need to stay overnight in the hospital after your procedure. Make plans as needed for your work and home.
- You cannot drive yourself home from the hospital or take a bus or taxi by yourself. Plan for a responsible adult to take you home when you are ready to leave the hospital.

- A nurse will call you to review your instructions. The nurse will:
  - Ask if you have allergies to any medicines, contrast, or shellfish.
  - Ask if you take warfarin (Coumadin), metformin (diabetes medicine), or other medicines that must be stopped before your procedure.
  - Remind you what you can and cannot eat and drink in the hours before your procedure.

## On the Day of Your Procedure

### At Home

- **Up until 8 hours** before you arrive at the hospital, eat a healthy, balanced diet and drink liquids as usual.
- **Up until 6 hours** before you arrive at the hospital, you may eat a light meal and drink liquids as usual. Avoid heavy or fatty foods.
- **Starting 6 hours** before you arrive at the hospital, do not eat anything. We advise you to drink clear liquids such as water, black coffee or tea (no milk or creamer), clear broth, Gatorade, soda, apple juice, or Boost Breeze liquid supplement.
  - **If you have diabetes:** Drink clear liquids such as water, black coffee or tea (no milk or creamer), clear broth, and diet soda. Avoid juice, regular soda, and sports drinks, since these can raise your blood sugar levels.
- **Starting 2 hours before you arrive at the hospital, do not eat or drink anything.**
- If you must take medicines, take them with **only** a small sip of water.

### At the Hospital

- Check in at Surgery on the ground floor of the Maleng Building at Harborview Medical Center.
- A nurse will greet you and help prepare you for your procedure:
  - Your *vital signs* (pulse rate, temperature, and blood pressure) will be measured
  - An *intravenous* (IV) line will be inserted into your arm vein
  - Blood will be drawn using the IV
- A nurse will also review your health history and discharge instructions.
- Our transport service will take you on a stretcher to meet the Anesthesia Team.
- The Neurosurgery Team will review the consent form with you.



**Before:** This image shows blood vessels that are supplying blood to a tumor (circled area).



**After:** This image was taken after embolization. It shows fewer blood vessels and a smaller tumor.

- You will receive a *sedative* (medicine that helps you sleep) through the IV in your arm.
- You will be taken into the Angiography Suite for the procedure.

### **During the Procedure**

- You will receive *general anesthesia* (medicine to make you sleep).
- Your groin area will be cleaned and draped with a sterile cloth.
- A small tube (*catheter*) will be inserted into your *femoral artery* (blood vessel in your thigh). It will be guided into the large arteries leading to the tumor. X-ray images will be taken while the catheter is being moved through your arteries.
- Contrast will be injected through the catheter into each artery. X-rays are taken while the dye moves through the blood vessels.
- A liquid called *onyx* or small *polyvinyl alcohol* (PVA) particles will be infused into the artery. These will block blood flow to the tumor.
- The procedure will last about 2 to 3 hours.

### **After Your Procedure**

- After your procedure, you will be taken to the Recovery Area.
- After you wake up, you will be moved to the Neuro Intensive Care Unit. Your friends and family can join you there.
- You must lie flat in the care unit for 6 hours. This will prevent bleeding from the *puncture site* (where the catheter was inserted). During this time, your nurses will:
  - Monitor you closely
  - Tilt your bed so you can eat
  - Help you use a bed pan if you need to urinate.
  - Help you change position if you are not comfortable
  - Check your vital signs and level of consciousness
  - Check your procedure site every hour
- After 6 hours, your nurses will help you get up and walk.
- You will most likely stay in the hospital for 1 night after this procedure.

### **At Home**

Your health is important to us. A nurse will call you the day after your procedure to ask how you are doing and to answer your questions.

## For 24 Hours

Medicine you received for the procedure can affect your judgment. **For your safety:** Do not drink alcohol, drive, use machinery, sign legal papers, or make important decisions for 24 hours after your procedure.

## What to Expect

After this procedure, it is normal to have:

- Bruising and tenderness in your groin area (this should go away after a few days)

## Self-care

- You may remove the dressing after 24 hours and take a shower.
- For mild to moderate pain, you may take *non-steroidal anti-inflammatory drugs* (NSAIDs) such as ibuprofen (Advil, Motrin) or naproxen (Aleve, Naprosyn). Follow dose instructions on the bottle.
- Walk often to speed your recovery. It is OK to walk up and down stairs.

## For 7 Days After Your Procedure

- Do **not** take baths or allow the puncture site to be covered in water.
- Do **not** do any deep knee bending.
- Do **not** do any activity that increases your heart rate or makes you breathe hard.
- Do **not** lift anything that weighs more than 10 pounds (a gallon of milk weighs almost 9 pounds).

## Questions?

Your questions are important. Call your healthcare provider if you have questions or concerns.

Weekdays from 8 a.m. to 4 p.m., call 206.744.9340 and press 2 to talk with a clinic nurse.

After hours and on holidays and weekends, call the Community Care Line (24-hour nurse): 206.744.2500 or toll-free 800.607.5501.

## When to Call for Help

Remember that some bruising at the puncture site is normal. **But, call 911 right away if you:**

- Begin to bleed at your puncture site – apply constant pressure while you wait for help to arrive
- Develop a lump at your groin area
- Have any signs of a stroke, such as:
  - Weakness or loss of feeling
  - Having trouble talking
  - Having trouble walking
  - Having trouble seeing
  - A severe headache that starts suddenly