Intra-Arterial (IA) Chemotherapy

Intra-arterial (IA) chemotherapy is a treatment that gives a high dose of chemotherapy directly to the area in your brain where your cancer is located. The medicine is carried through the arteries that supply blood to the brain. The location of your brain tumor will determine which arteries will be used to best treat your cancer. One to three arteries can be used for this treatment.

You will be scheduled for admission to the hospital every 4 to 6 weeks. IA chemotherapy requires a hospital stay for 1 to 2 nights. Your chemotherapy schedule and the medicine used for your treatment will be determined by your doctor. The nurse will give you handouts on the drugs for your treatment.

A brain MRI will be done every 1 to 2 months to see how the tumor has responded to the treatment.

Before Your Procedure

- It is important to tell your doctor if you are taking medicines that thin your blood (such as Coumadin). Your doctor will determine the exact time for you to stop taking this medicine (it is often 3 to 5 days before your procedure). If you take aspirin, you may continue to do so as directed.

- You can take medicines (other than blood thinners) the morning of your procedure with small sips of water.

- You should not eat or drink anything for 4 hours before your procedure.

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What happens when I get to the hospital?

- You will be admitted to the hospital the day before or the morning of your procedure.
- Lab work (blood tests) will be checked before the procedure.
- Your nurse will give you medicines to help you relax and to help prevent nausea.
- You will be taken down to the radiology department on a cart. In the radiology department, you will be greeted by the nurse and the radiology technologist who will help you get on the procedure table.
- The nurse will place a blood pressure cuff on your arm and EKG electrodes on your chest. This equipment will allow you to be monitored closely during the procedure.
- You will have oxygen administered through your nose during the procedure.
- The nurse may give you additional medicine to make you comfortable and sleepy.

How is the procedure performed?

- The IA chemotherapy is given during a cerebral angiogram. A cerebral angiogram is a special x-ray that allows the doctor to see the arteries of your brain.
- A radiologic technologist will assist the doctor with your procedure. First, a small area of your groin will be cleaned. A sterile towel will be placed over the area to keep it clean. A numbing medicine will be injected into the area by the doctor, a neuro-radiologist who specializes in radiology and the treatment of the brain.
- The doctor will place a guide port into an artery in your groin. Then a long, narrow tube called a catheter will be guided through the port into the artery in your brain. Once the catheter is in the correct place a special medicine called dye or contrast will be put through the catheter. The dye allows the doctor to see the arteries and veins. You may feel warm for a few seconds as the dye is given.
- A series of x-rays will be taken with a special camera. The injection and filming may be repeated several times to show different blood vessels.
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- The chemotherapy will be given over 10 to 15 minutes through the catheter.
- The catheter will be removed after the chemotherapy is done.
- The entire procedure will take about 1 to 2 hours.

After Your Treatment

- You will be taken to the recovery area on a cart.
- The nurse will remove the guide port and hold pressure on the groin area for about 15 minutes. Your blood pressure, heart rate and breathing will be monitored during this time. You will remain in the recovery area for about one hour. You will be taken back to your room on a cart.
- After the procedure you will be on bed rest for a total of 4 hours. This is done to keep the leg where the catheter was placed straight. **Be sure not to move or bend your leg during this time.** You will need to use the bedpan or urinal during this 4-hour time period. This will help prevent problems such as bleeding and bruising.
- The nurse will check the groin frequently for bruising and bleeding.

At Home

- You may feel tired your first day at home. Allow yourself to rest as needed.
- Drink 8 to 10 glasses of fluid for 2 to 3 days after the procedure to help remove the medicines from your body. This will help protect your kidneys.
- The day after your treatment, you may shower and go about your normal routine. There are no special precautions after your treatment.
- If the groin bandage is still in place, you can remove it the day after you get home.
- You will have medicine to take at home if you have nausea.
- Chemotherapy can lower your blood counts including the white blood cells, red blood cells and platelets.
  - Lab tests will be done weekly after your treatment. You will be given information about your lab work at discharge.
- It is very important to follow up with your doctor and have your lab test done.
- Treatment may be delayed or postponed if the doctor thinks your blood counts are too low.
- If you have any questions about this procedure or your condition, please call your doctor.