
Radiation Implants for a Brain Tumor

Brachytherapy is a type of treatment for cancer. This form of treatment is also called interstitial radiation. Small radioactive seeds are put into or near the brain tumor. This is done with surgery. Brachytherapy is not used very often for brain tumors. Treatment with external beam radiation therapy (EBRT) is much more common.

How brachytherapy works

The radiation implants may be used to slow or control tumor growth. The radiation only travels a short distance in the body so there's little damage to nearby tissue. Stronger seeds may be removed after a few minutes or after a few days. Weaker seeds may stay in. They become inactive over time.

Brachytherapy lets higher doses of radiation get to smaller areas than EBRT. It is often used along with other treatments. It may be used with surgery or chemotherapy. It may also be used along with EBRT. The use of brachytherapy depends on tumor size and where the tumor is in the brain.

Risks of brachytherapy

Discuss any questions or concerns with your healthcare team before having the procedure. Risks include:

- Infection
- Seizures
- Headache
- Death of nearby normal tissue (radionecrosis)
- Brain or tumor swelling at the time of the procedure or weeks later

During the procedure

- You may be awake or sedated during the procedure. If so, local anesthesia may numb the area on your head. Or you may be given general anesthesia. This will cause you to sleep through the procedure.
- Thin tubes (catheters) may be placed into small holes drilled into your skull. The radioactive seeds are sent through the catheters into the tumor. The catheters may be removed right away. Or they may be left in place until the seeds are removed.
- The seeds may give off a low level of radiation. Because of this, you will be in a private room. Visitors may be limited. You may need to wear a helmet or stay in a shielded room for a certain length of time. Talk with your healthcare team about what precautions you will need to take.