Radioactive Seed Guided Lumpectomy

What is a radioactive seed-guided lumpectomy?

- A **lumpectomy**, sometimes called a **partial mastectomy**, is the surgical removal of an area of breast tissue. This is as opposed to a total mastectomy, in which all the breast tissue would be removed.

- The **radioactive seed** is a tiny metal seed, about the size of a small sesame seed. The implanted seed contains a small amount of radiation. The seed will stay in your body until it is taken out during your surgery.

- A radioactive seed **localization** is done by radiology to help your surgeon to locate the area of breast tissue that needs to be removed.
  - Before your surgery, a radiologist will take pictures of your breast using the mammogram or ultrasound.
  - When (s)he locates the area in question, (s)he will use lidocaine to numb part of your breast.
  - (S)he then will insert a radioactive seed to the target area of breast tissue. You will have a small band-aid placed over the site. You do not have to take any special precautions while the seed is in place.
  - During surgery, your surgeon uses a sterile Geiger counter to the target area and then removes the radioactive seed along with the tissue around it.

- After surgery, the removed tissue (“the specimen”) is sent to pathology to be looked at under the microscope. If your surgery is to remove cancer, one of the things the pathologist will report is the **margin status**. This refers to the edges of the specimen. If cancer cells are at or close to a margin, your surgeon may recommend **re-excision**.
  - This means you would come back for another day surgery on a different day, and your surgeon would take a little more tissue from that margin.
  - Most of the time, if you need a re-excision, you will not need another radioactive seed localization.

Frequently Asked Questions

**Q: Will I become radioactive?**
**A:** The items you touch, people you encounter and clothes you wear will not become radioactive. If you have any questions, please contact the Radiation Safety Service Department at 617-732-5963.

**Q: Will a lumpectomy change the shape or size of my breast?**
**A:** Maybe. The answer depends on how much tissue your surgeon needs to remove, where the target area is, and the original size and shape of your breast.

**Q: Will I have a scar?**
**A:** Most women have a small, subtle scar at the site of lumpectomy. If you tend to develop dark scars, you are more likely to have a visible scar.

**Q: How long does the lumpectomy procedure take?**
**A:** A lumpectomy alone is usually under an hour. You can plan to be at the hospital for at least half the day.

**Q: When will I know my margin status?**
**A:** The final pathology results from your surgery will take 1-2 weeks.