Radioactive Iodine-125 Implants (Seeds) for Localization in Breast Surgery

Before surgery, we place a small metal “seed” into the area of the breast lesion. It is about the size of a thin sesame seed. The seed contains a tiny amount of radioactive material and acts like a ‘marker’ to help guide your surgeon (when they remove the breast lesion). This technique allows for a more precise surgery, decreases the need for more surgery (compared to other techniques), and removes a smaller piece of tissue.

The metal seed is a sealed source of radioactivity. All the radioactive material is inside a metal outer layer; it cannot be spread from contact with the seed. It stays in the breast and is removed along with the breast tissue during surgery. Radioactive material gives off radiation even though it is enclosed in metal. This is how we find the seed during your procedure. There is no evidence that this small amount of radiation causes harm to you or other individuals you come in to contact with.

- **People who are in prolonged close physical contact with you may be exposed to very small amounts of radiation.**

It still makes sense to do what you can to reduce exposure to radioactivity. Here are 3 tips:

1. **Distance:** The farther away you are from the source of radiation, the less exposure you have. One foot away, the exposure is very small; at 3 feet, it is almost zero.
2. **Time:** The more time you spend close to someone with implanted seed(s), the greater your exposure. To decrease your exposure, minimize the time you spend very close to them. Brief contact - hugging, kissing or shaking hands - is safe. Avoid placing an infant, child, or young animal on your chest for more than 30 minutes a day while the seed is inside you.
3. **Return:** It is important that you come back to have your scheduled procedure (when seeds are removed). After removal, you will no longer contain any radioactive material and all exposure levels will return to zero or what we call background levels of radiation.

**Travel:** This low activity radioactive seed may be detected by radiation monitors at international borders or during airline travel and cause increased scrutiny. Avoiding this type of travel may be wise.

Transportation Security Administration Officials or U.S Border Patrol can consult, if necessary.

**To contact Roswell Park**

Mammography: 716-845-3014 (Mon-Fri 8am – 5 pm)

Radiation Safety Dept 716-845-5999, Radiation Safety Officer: 716-845-1048. (Mon-Fri 8am – 5 pm)

Main Hospital: 716-845-2300 or Toll free 1-800-ROSWELL (1-800-767-9355) (Open 24/7)