Radioactive Seed Localization for Breast Surgery

What is radioactive seed localization?
Localization is a way to mark the area of your breast that will be removed during surgery. This can be done two ways; using a wire, or using a radioactive seed. The seed can be placed several days before surgery. It stays in place. Placing it in advance will decrease the time spent at the hospital on the day of surgery. Like wire localization, the radioactive seed is placed by a radiologist. It is done in the breast imaging department. This allows the surgeon to be more exact in finding the area of the breast involved. Using a seed instead of a wire may allow for less breast tissue removal.

What to expect during seed localization
During the Procedure:
1. The area of your breast is cleaned with an antiseptic solution.
2. The doctor injects numbing medicine (Lidocaine®) into your breast. It may sting. This numbs your breast.
3. The doctor places a small needle into your breast at the site of concern. You may feel pressure during the procedure. If you feel pain, please let the staff know. More numbing medicine can be given.
4. The needle is removed when placement of the seed is confirmed. The radioactive seed stays in place. The seed is very small. You will not feel it.
5. More mammography pictures are taken after the procedure is done. This confirms the seed placement. Your surgeon will refer to these during the surgery.
6. A small strip of tape called a steri-strip is placed over the site.

During wire localization, a wire is placed in your breast. This marks the site of the cancer. A wire used to mark the site of cancer is placed on the same day that surgery is performed. You must arrive early on the day of surgery for this procedure.

A radioactive seed is a tiny metal piece. It is about the size of a sesame seed or pencil point. The radioactive matter is sealed inside the seed. It stays inside the seed. People and things, you touch do not become radioactive. The figure to the left shows the size of the radioactive seed compared to a dime.
Care after the Seed Localization.  
You will meet with a nurse after the seed placement. The nurse will assess the insertion site for bleeding. A protective bandage is placed over the site. Remove the outer dressing in the evening, if you are having surgery the next day. Shower with antiseptic soap the evening before and morning of surgery. The Breast Center Clinic will provide instructions and soap. Leave the steri-strips intact.

If your surgery is not the same day, avoid vigorous arm movements and heavy lifting (more than 10 pounds) for the next 24 hours. You may return to work and most activities the next day.

You may apply ice to the insertion site. This may help to reduce swelling and pain. Do not place ice directly on the skin. We suggest you wear a comfortable supportive bra to lessen breast movement. A sports bra works best.

You may shower the next day. Allow water to run over the insertion site. Pat this area dry. Do not soak in a tub or pool for 48 hours.

You may have some mild pain and bruising. If you need something for pain, Tylenol will often help. Take as directed.

Watch for any signs of infection:
- Temperature over 100.4°F.
- Significant swelling or firmness at the site.
- Warmth or increased redness at the site.
- Drainage around the site that is pus-like.

Please call the Breast Center if you have heavy bleeding from the insertion site (bleeding that soaks the bandage or that is flowing from the site). Hold firm pressure to the site if this occurs. It is normal to have a small amount of blood (dime to quarter size) show through on the bandage.

What about radiation?
The radiation in the seed is not dangerous. It gives off only enough radiation to act as a marker for the surgeon. Those who are in close contact with you may be exposed to very small amounts of radiation. This is not harmful. However, there are ways to reduce exposure to others:

Distance
The amount of radiation coming from your body is very small. It decreases to almost zero at 3 feet away.

Time
- Radiation exposure to others depends on how long you are in close contact with them. You can do most daily activities.
- You should avoid placing an infant, child, or young animal on your chest for more than 30 minutes per day while the seed is in place.
- Once the seed is removed, the radiation is gone. The seed is disposed of according to strict guidelines.

Day of Surgery
The surgeon will make an incision into your breast. They use a special tool to remove the seed and the tissue around it. The tissue is looked at after it is removed. This assures that the tissue contains the seed and the area of concern that was seen on breast imaging.
The tissue is sent to our lab. A pathologist will look at it under a microscope to see what types of cells are present. You will be given the results in 3-5 working days. Your surgeon will contact you to discuss results.

Seed removal and disposal
It is important you return for your scheduled surgery to have the seed removed. We are required to assure proper disposal of every seed placed.

If there is any event that would keep you from having the radioactive seed removed on the scheduled surgery date, please call the UW Hospital Breast Center immediately. If you are unable to call, be sure that someone contacts the Breast Center on your behalf.

Phone Numbers
If you have questions or concerns or are not able to keep your surgery date, please call the UW Health Breast Center (608) 266-6400 and ask to speak to a nurse. Hours are Monday through Friday, 8:00 a.m. to 5:00 p.m.

For medical emergencies, call 911.

After hours and weekends, call (608) 262-2122. This will give you the paging operator. Ask to speak to the blue surgery resident on call. Give the operator your name and phone number with the area code. The doctor will call you back.

If you live out of the area you may also call toll free at 1-800-323-8942.