

## Brachytherapy Information & Common Side Effects

### **Day of Procedure**

During your implant, small radioactive "seeds" will be implanted directly into your prostate. The seeds are the length of a grain of rice and the thickness of a mechanical pencil lead. The seeds are inserted into the prostate using needles placed into the gland under ultrasound guidance. The needles are placed into the prostate through the perineum (the area between the scrotum and anus). There are no incisions (cutting). You will be asleep for the entire procedure. After the procedure you will go to the recovery room to wake up from the anesthesia. You will have little to no pain.

After about an hour, you will be discharged from the facility to go home. Because you will have had anesthesia, you cannot drive yourself or use a ride service. You must have a family member or friend available to drive you home. Please keep this in mind as your procedure will be cancelled if you do not have a suitable ride home.

### **Returning to Normal Activities**

Because there are no incisions, you will be able to return to your daily activities immediately. You can return to work as soon as you feel ready to return (as early as the next day after the procedure). It is advisable to avoid lifting very heavy items or riding on a bicycle with a hard seat for a few days after the procedure.

### **Side Effects**

The main side effect of the implant is urinary difficulties due to swelling of the prostate. This swelling makes it difficult to empty the bladder. The most common side effect by far is getting up frequently at night to urinate. Other urinary complaints include slow stream, daytime frequency, and urgency. You may have burning with urination but this usually resolves within 1-2 days. Rectal irritation is also possible but is less common. Rectal irritation may cause a sensation that you need to have a bowel movement. You may also notice the scrotum and surrounding area turning black and blue. This is just blood beneath the skin (bruising) from the needles. It is not painful and there is no need to do anything about it. It will resolve over a few weeks. The urinary and rectal side effects typically persist for about 4 weeks and then begin to resolve over the next few weeks.

The peak of the side effects usually occurs about 7-10 days after the implant due to the progressive irritative effects of the radiation. The severity of these side effects vary but they do improve! If you are not already taking it, you will **receive a prescription for Tamsulosin (Flomax)** to take after the implant. This medication helps the bladder empty more completely so you go less frequently, particularly at night. We also recommend the **anti-inflammatory medication naproxen (brand name Aleve)**, one tablet in the morning and one in the evening. This will reduce the swelling and inflammation of the prostate and usually helps with the side effects. You should check with your primary care doctor before taking naproxen if you are on prescription blood thinners or have kidney problems.

In rare cases, you will have urinary retention and may feel an inability to urinate after the procedure. If this happens, you will need placement of a Foley catheter to help you empty your bladder, typically for a few days.

If your side effects are severe, please call the office to speak with Dr. Kurtzman or Dr. Agarwal.

## **Radiation Precautions**

Palladium (Pd-103) is the radioactive isotope contained in the seeds. The half-life of Pd-103 is approximately 17 days. The radiation from the seeds diminishes exponentially over time. In 17 days 50% of the radiation has been delivered, in 34 days 75%, in 51 days 87.5% and so on. The easy way to remember it is that 75% of the radiation is gone in 1 month and essentially all gone by 2 months.

Because of this fast radiation decay, radiation precautions are necessary for only 4 weeks. From the beginning, the radiation exposure to others is extremely small, but we ask you to follow the following guidelines:

- 1) No small children sitting in your lap for 4 weeks. You do not need to avoid children at any time. They should just not sit in your lap for this period of time.
- 2) Keep some distance (3-6 feet) from pregnant women for 4 weeks. Again, you do not need to avoid pregnant women, just keep at the 3-6 feet recommended distance.
- 3) Wear a condom if you are going to have intercourse for 4 weeks because it is possible to pass a seed with ejaculation.

No precautions are necessary for other adults or pets. You do not need to sleep separately from your spouse at any time. At no time are you or your bodily fluids radioactive. The Pd-103 is sealed within the seeds. You cannot contaminate surfaces by contact.

-Ankit Agarwal, M.D.

- Steven Kurtzman, M.D.

