

patient guide to prostate brachytherapy

I have Prostate Cancer. What now?

If you are reading this, you or someone you love has been diagnosed with Prostate Cancer. Things may seem overwhelming, but they don't have to be. The majority of prostate cancers never become a threat to life. You can take comfort in the fact that many advances have been made in the successful treatment of prostate cancer. There are many options available, therefore it is important to take time to do your homework and make an informed decision. Hopefully the information here can help explain what's happening and guide you to a decision and course of treatment with which you are comfortable.

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BRACHYTHERAPY is a low-energy type of radiation therapy in which small radioactive devices ("seeds") are placed in direct contact with the cancerous tissue being treated.



The Basics

The Prostate is a walnut-sized gland that surrounds the urethra. It sits between the bladder and the rectum and adds vital nutrients and fluid to the sperm. Second to skin cancer, prostate cancer is the most common cancer in males today. One in six men will develop prostate cancer in their lifetime. According to the American Cancer Society, nearly 100% of men diagnosed and treated five years ago will survive prostate cancer. For men diagnosed and treated 10 years ago, 91% will survive. If you have just recently been diagnosed, the outlook is most likely much better, due to earlier detection and improvements in treatment.

Your doctor has suggested a treatment called Brachytherapy, or prostate seed implants. What follows is an explanation of Brachytherapy and what you may expect before, during and after treatment. Your doctor is the best resource for any questions or concerns you have regarding Brachytherapy. Once you consult with your doctor, family and friends, you will likely agree that seed implants are the best way to treat your prostate cancer.

Brachytherapy is the minimally invasive, internal radiation therapy for prostate cancer. In contrast to external beam radiation therapy, which delivers a high-energy dose of radiation from outside the body, Brachytherapy is a low-dose radiation treatment during which tiny radioactive devices placed inside the body deliver the radiation. These radioactive devices, called "seeds," are implanted directly into the prostate gland and destroy the cancer from the inside, sparing the surrounding healthy tissue. On average, 60 to 120 seeds, each smaller than a grain of rice, are placed in a predetermined pattern specific to your prostate gland and remain there, permanently and harmlessly in place. Iodine and Palladium are the two most commonly used radioactive isotopes for Brachytherapy. Your doctor will determine which will work best for you.

These isotopes lose their radioactivity quickly, therefore after approximately one year their levels will be undetectable. Brachytherapy is a one time, out-patient procedure after which normal activity can be resumed within a day.

Why Brachytherapy?

Comparisons between Brachytherapy, radical prostatectomy and external beam radiation can be found in the chart below. Clinical comparisons have shown lower incidence of impotence and incontinence, faster recovery times, lower costs, fewer rectal side effects and less chance of developing secondary cancers after treatment with low-dose Brachytherapy.

PROCEDURE	Brachytherapy	Radical Prostatectomy	External Beam Radiation
TREATMENT TIME	Outpatient 1 - 2 hours	Inpatient 2 - 3 days in hospital	Outpatient 5 days per week 7 - 9 week therapy
RECOVERY TIME	2 - 3 days	3 - 4 weeks	N/A

Brachytherapy as a proven treatment

Memorial Sloan-Kettering Cancer Center in New York City was the first to perform low-dose rate Prostate Brachytherapy in the early 1970s. As a result of its effectiveness in treating prostate cancer, published data indicates that the use of Brachytherapy has grown remarkably. It is estimated that more than 50,000 of these procedures are done each year.

For more than 14 years, IsoAid has been working with doctors around the world to provide patients with the highest quality Iodine and Palladium seeds in the industry. As a manufacturer of both isotopes, we continuously strive to offer safe and effective products that will exceed your needs and expectations, as well as work with healthcare professionals to make sure that you are being offered the best possible treatment available.





Before: Preparing for the implant

On an appointment prior to your implant, your doctor will use an ultrasound to measure your prostate and determine the type (Iodine or Palladium) and number of seeds required to treat your cancer. The doctor and medical physicist will work together to generate a plan or "map" for seed placement based on your prostate gland's volume, shape and tumor location.

The seeds will be delivered to the doctor as close as possible to your procedure time since the radiation within the seeds decays over time. The seeds can be delivered in a variety of forms, depending on doctor preference. The doctor can request loose seeds to load into needles themselves, or they might use a MickTM technique to implant the seeds in a more Real-time method. The seeds might also come already inserted into long, thin needles and loaded according to the doctor's treatment plan.

During: Implant day

During the procedure, you will be positioned on the operating table with the needle template placed against the perineum. You will most likely receive general or spinal anesthesia to ensure you feel no discomfort during the procedure. You will not feel the needles going in or the seeds being deposited. The doctor will use an ultrasound to guide the needles through the skin and directly into your prostate gland. Once the seeds are implanted the empty needle is removed. The small size of the seeds causes no discomfort and allows them to stay in place as dormant titanium shells once their radioactivity has decayed. The implant is a half-day, outpatient procedure with only one to two hours needed for the entire process. After two to three hours for recovery and observation you will be released.

After: What to expect

Temporary side effects include mild discomfort, fatigue, diarrhea, rectal irritation, and small amounts of blood and/or sperm in the urine for a few days. You might also experience an increase in urinary tract symptoms; such as frequency, burning and urgency.

Very rarely a seed may migrate to the bladder and be passed during urination. You would most likely experience this within the first 24 hours. The loss of a seed will most likely not lessen the effectiveness of your treatment. Your doctor will give you instructions on how to handle this should it occur.

You should refrain from strenuous activity and heavy lifting, as well as applying pressure to the area.

After the implant you may engage in sexual activity with a condom. This is recommended for the first two months after the implant. Please consult your doctor regarding time frames on restrictions and when you may resume normal activities.



Long-term prognosis

The five-year success rate for seed implants is nearly 100%. According to the American Cancer Society, 93% of Brachytherapy patients survive at least 10 years, and 76% survive at least 15 years. The 10-year and 15-year success rates are the same as removing the prostate.

Brachytherapy is an excellent choice for many reasons. These successful outcomes, along with fewer side effects, less time for treatment and lower cost give you an outstanding chance at triumphantly beating prostate cancer. Always consult with your doctor if you have any additional questions.



Frequently Asked Questions

Will I be radioactive after the procedure?

The prostate gland absorbs almost all of the radiation you receive, and therefore does not pose a threat to other people. Objects that you touch do not become radioactive. Although a very small amount of radiation will escape your body, you should not worry about general radiation exposure to your family and friends. Your doctor will provide you with detailed guidelines and information regarding short-term precautions to take around young children, pregnant women and pets.

Will I have any discomfort?

Rates of complications are significantly less with Brachytherapy than those associated with radical prostatectomy or external beam radiation. For two to three days after the implant you may experience some soreness between the rectum and the scrotum. This can be managed very effectively with mild analgesics. The effect can be immediate or delayed.

What are the short- and long-term effects of seed implants on my potency?

Brachytherapy, as a treatment, lessens the risk of impotence and urinary incontinence when compared to other treatments. However, like any cancer treatment, side effects may occur. Approximately 25-30% of men who were fully potent prior to treatment will regain potency after the implant. Fifty percent will have some decrease in their ability, but will still be able to enjoy intercourse. The majority of these men can be successfully helped with medication. Be sure to tell your doctor if you experience any

Will I become incontinent?

significant or troublesome side effects.

Less than 1% of men will experience long-term incontinence. Some patients will experience a short-term feeling of urgency. As the seeds lose their activity, this will resolve.

What type of follow-up do I need to do after my seed implant?

Your doctor will want to follow-up with you in thirty days for a post-implant exam. In most cases you will then come in for PSA tests every six months, with annual exams recommended. Based on your doctor's recommendation, after five years a PSA test may then be performed annually.



We've done our best to answer your questions so that you are fully prepared and comfortable with your upcoming Brachytherapy procedure. Should you have any other questions or concerns, please consult your physician or visit us online at www.isoaid.com.

For more information and support please consult the following resources:

The American Cancer Society www.cancer.org 800.227.2345

National Cancer Institute

www.cancer.gov 800.422.6237

US TOO International, Inc.

www.ustoo.com 800.808.7866

Information for this brochure was found on websites for The American Cancer Society and the National Cancer Institute



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