

# Radioactive Seed Implantation

## “Treatment for Prostate Cancer”

The Radioactive Seed Implant is an ultrasound-guided implantation of radioactive seeds into the prostate. Eligibility for the implant depends upon the stage of the cancer and the size of the prostate. Before the implant procedure, the patient will have an ultrasound mapping of the prostate called a volume study. A radiation physicist and radiation oncologist, aided by sophisticated computers, uses the volume study to determine both the exact number of seeds needed to treat the cancer and precisely where the seeds should be placed.

New Albany Urology along with a team at Baptist Memorial Health Care now offers radioactive seed implantation as a treatment for prostate cancer. Traditionally, men with localized prostate cancer had two treatment options, a radical prostatectomy or external beam radiation therapy. Many men have taken advantage of this new therapy and its potential for fewer complications.

### ***Description***

Radiation seed implantation is a form of internal radiation. Tiny titanium canisters called "seeds" that carry a radioisotope are implanted into the prostate. The seeds provide a low energy, continuous, radiation of the cancer. With the dose of radiation concentrated in the prostate, surrounding tissues receive less radiation exposure than with traditional treatment.

### ***Eligibility***

Eligibility for this treatment is carefully considered by the patient's urologist and radiation oncologist. Some of the considerations are the size of the prostate, the aggressiveness of the tumor, PSA level, the patient's medical history, and quality of life issues. In some cases, radioactive seed implantation is combined with external beam radiation therapy to treat the cancer.

### ***Procedure***

Utilizing a state-of-the-art implantation system for highly accurate placement of radioactive seeds into the prostate, a team of urology and radiation oncology specialists work to place internal radiation therapy exactly where it is needed most.

No surgical incision is required. Instead, thin needles are passed into the prostate gland through the skin between the scrotum and the rectum. As the needles penetrate through the prostate, they are seen on the screen of the ultrasound machine and can be accurately guided to their final position.

The procedure is performed in the hospital with general or spinal anesthesia. Typically patients are back to their normal activities within a few days. The tiny seeds gradually deliver radiation to the prostate to kill the cancer cells. The radioactivity level steadily drops off and disappears after several months.

Men with early-stage prostate tumors are the best candidates for seed implantation. Because of the development of the PSA test, patients are now being diagnosed at earlier stages, permitting more patients to become potential candidates for this therapy. Your doctor can review your diagnosis, discuss treatment options and determine if you are a candidate for seed implantation.

The seed implantation is done on a same-day-surgery visit without an overnight hospital stay.