

PROSTATE CANCER

There are few moments more traumatic in a man's life, than when he hears his physician say, "You have prostate cancer." Yet for over 180,000 American men 11,800 in New York alone this shattering diagnosis becomes a life preserving challenge.

Fortunately, great strides have been made in the diagnosis and treatment of this malignancy. The regular testing of PSA (prostate specific antigen) levels for men age 50 and over (age 40+ for African American men) has improved the likelihood of an early diagnosis, and therefore successful treatment. Heightened awareness of the subtle symptoms of prostate cancer, such as blood in the urine, difficulty urinating, weight loss, bone pain and anemia, has also encouraged men to seek their physician's care while still in early stages.

Prostate patients today have more treatment options available than ever before. Technological advances, particularly in the use of radiation and prostate seed implants, have increased the chances of survival and cure.

Currently, three primary forms of treatment are used, namely radical prostatectomy, external beam radiation (including 3-D conformal therapy), and prostate seed implantations. Each of these treatments may be used alone or in conjunction with another, depending upon the degree of tumor progression.

Radical prostatectomy involves the surgical removal of the prostate gland and seminal vesicles. The advantage of this procedure is the successful treatment of early cancer. However, it is a major surgery that requires hospitalization and long recovery. In addition, side effects frequently include impotence and incontinence. Older men, who are not in good health, may have difficulty tolerating this procedure.

External beam radiation therapy, which uses radiation to damage the DNA in order to kill or arrest the growth of cancerous cells, has proven to be an equally effective means of treatment.

"The benefits of external beam radiation for prostate patients is the significantly diminished risk of impotence and long-lasting incontinence," said Dr. Vilasini Shanbhag, a co-founder of Radiation Oncology Group, which has been treating patients in free-standing facilities since 1984.

"Patients can receive treatments in the comfort of facilities that are pleasant and easily accessible. They do not have to endure hospital stays and long recovery time to be successfully treated," she continued.

Radiation treatments are often given five days a week, over the course of five to eight weeks. Weekends provide normal cells the "time off" to recover. The process itself is painless, with minimal side effects, and allows patients to pursue their regular daily activities.

The advent of 3-D conformal therapy has also expanded the precision in which radiation may be administered to prostate patients. By using advanced computer graphics, CT scans and algorithms to precisely generate a visual, three-dimensional image of a tumor, the radiation oncologist is able to deliver radiation within the tumor's confines. This minimizes the damage to surrounding healthy tissue, maximizes the dosage given and reduces any side effects.

Another effective option to radical prostatectomy or external beam radiation is prostate seed implantation.

Composed of radioactive iodine-125 or palladium-103, "seeds" the size of rice grains are permanently implanted in the prostate. Precisely positioned using ultrasound imaging and thin hollow needles, these seeds will slowly administer a specific dose of radiation over a period of months.

Frequently used in early stages, before the cancer has spread beyond the prostate, seed implants offer the benefit of being an outpatient procedure that has few complications, and reduces the incidences of impotence and incontinence. It also allows patients to return to their normal routines and life sooner than with surgery or external beam.