

Dr. Robert Brookland holds a cartridge containing 15 radioactive seeds, which will be implanted into a patient's prostate.

*Dr. Robert Brookland, M.D.
Chairman
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Complete Range of Treatment Options for Prostate Cancer

PROSTATE CANCER AFFECTS MORE THAN two million men in the U.S. and, 10 years ago, at the age of 63, Cecil County resident Charles Ham became one of those men. When a routine screening found his PSA level had increased to 9.4, he was referred to **Ronald Tutrone, Jr., MD**, GBMC's Division Head of Urology, for further assessment. "If it were not for the thorough and direct approach Dr. Tutrone took to treating my cancer, I might not be here today," says Mr. Ham.

Dr. Tutrone performed a trans-rectal ultrasound guided needle biopsy with sectional mapping of the prostate that uncovered Stage T1C prostate cancer. A CAT scan found no evidence the disease had spread beyond the prostate.

"Mr. Ham had several treatment options," notes Dr. Tutrone. "Because he had a Gleason scale score of seven, watchful waiting was not recommended, but he did have the choice of radical prostatectomy, external beam radiation, hormonal therapy and brachytherapy. Both surgery and radiation have equivalent 15-year cancer-free survival rates, so Mr. Ham chose radiation because it was the path with the least risk of post-treatment urinary incontinence and sexual dysfunction."

Mr. Ham underwent brachytherapy preceded by hormonal treatment with Lupron. Brachytherapy involves placing a series of needles in the perineum while the patient is under anesthesia in the operating room. Small radioactive pellets are introduced through the needles into the prostate. The location and number of the pellets is guided by images provided via a trans-rectal probe.

"No treatment does a better job of confining the radiation dose to the prostate and of preserving potency," explains **Robert Brookland, MD**, Chairman of the Department of Radiation Oncology at GBMC, who performed Mr. Ham's procedure in concert with Dr. Tutrone.



According to Dr. Ronald Tutrone, patients considering treatment options for prostate cancer need to make an informed decision with their surgeon and radiation oncologist.

The advantages of brachytherapy include the minimally invasive nature of the procedure, the convenience of a one-time treatment, and the ability to perform the procedure on an outpatient basis.

Brachytherapy side effects include about two months of increased urinary urgency and frequency and the need to avoid close contact with others for about four months. One potential disadvantage is that the seeds can migrate a few millimeters over time. A new technology, however, virtually eliminates that problem by linking the seeds together. "Using this technology to prevent seed migration has not added any time to the procedure, which usually takes about an hour and a half," says **Alan Geringer, MD**, a surgical urologist who practices at GBMC.

Ten years after his treatment, Mr. Ham remains cancer-free with a PSA level of 0.5. He sees Dr. Tutrone once a year for a PSA check.

"Choosing a prostate cancer treatment is a very individual decision," adds Dr. Tutrone. "Patients need to understand the options and make an informed decision with their surgeon and radiation oncologist." ■

For more information about urological services for prostate cancer or about radiation oncology at GBMC, visit www.gbmc.org/cancer.

New treatments give patients more choices

Since Charles Ham underwent treatment for prostate cancer 10 years ago, a number of new treatments have been developed, including:

- Robotically-assisted surgery
- A computer program that uses real-time rectal ultrasound data to provide images that allow ideal placement and dosage of brachytherapy pellets
- The use of a short-acting isotope of Cesium, which has a faster fall off of side effects, for brachytherapy
- There is also an ultra-sensitive PSA test in development that would advance early detection