Treatment Zaps Prostate Cancer With Sound

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Tulane University School of Medicine urologist Dr. Benjamin R. Lee is conducting a clinical trial of a new, incisionless technique to remove prostate cancer in patients whose cancer has returned following radiation treatment.



Meeting with a patient, Dr. Benjamin R. Lee discusses the clinical trial of a new technique that removes prostate cancer without an incision. (Photo by Paula Burch-Celentano)

The treatment, called high intensity focused ultrasound, or HIFU, uses ultrasound energy, or sound waves, to rapidly heat up tissue to kill and destroy the cancer cells. The energy is directed via an ultrasound probe through the rectal wall, with no incisions through the body, similar to how kidney stones are treated without any incisions.

Ultrasound energy is focused at a specific location and, at that focal point, the temperature rises to almost 194 degrees Fahrenheit in a matter of seconds. Any tissue at the focal point is destroyed, leaving outside tissue unharmed.

"This is an exciting new treatment option for men with recurrent prostate cancer," says <u>Lee</u>, director of the fellowship programs in robotics, laparoscopy and endourology at Tulane. "Typically, surgery for prostate cancer after radiation has a higher risk for side effects since the radiation affects the tissue's ability to heal."

Tulane is participating is a 15-site clinical trial of the HIFU technique along with the University of Californiaâ?"Los Angeles, M.D. Anderson Cancer Center and New York University. Lee is the principal investigator for the Tulane portion of the study.

Doctors are looking to determine whether the new therapy is more effective in eliminating the cancer with fewer side effects than traditional techniques. Risks from traditional surgery after radiation include delayed wound healing, incontinence, rectal injury and erectile dysfunction. Prostate cancer is the second most common cause of cancer death in men, taking the lives of 30,000 men in the U.S. each year, according to the American Cancer Society.

For more information about HIFU, visit MyProstateCancer.com or call the Tulane Department of Urology at 504-988-5271.