



VIRGINIA PROSTATE CENTER Newsletter

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Finally a Randomized Control Trial Studying the Benefits of Surgery for Prostate Cancer

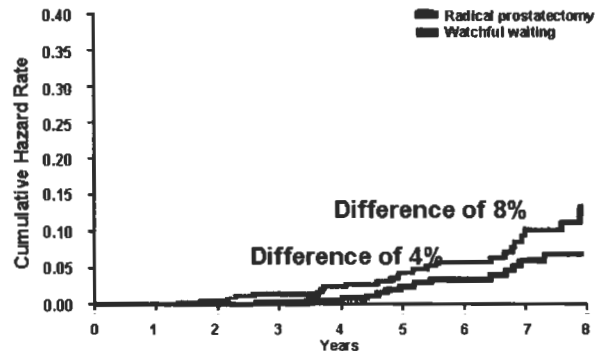
By Paul F. Schellhammer, M.D.

While it seems intuitive that early detection of prostate cancer by PSA monitoring and early treatment by either radiation therapy or surgery should result in an increased chance of cure of disease and a decrease in prostate cancer mortality, this concept has not been defined by the gold standard requirement of medical progress, the randomized trial. As many of you may be aware, a randomized trial studies two acceptable, individually successful and frequently employed strategies for a particular disease to determine which may have a better outcome. Patients who are suitable for either are randomized (a coin-flip assignment) to one treatment or the other. The reason for this is to balance out the large number of "confounding" circumstances that arise when physicians and patients select a particular treatment and the subsequent attempts to compare the two therapies. The problem with this latter method is termed "selection" bias -- patients selected for factors that improve outcome. There are a number of known but a larger number of unknown factors that influence disease progression other than necessarily the treatment that has been provided. For example, patient age, health, tumor size, genetic comparison, etc. For those of you who wonder about the

legitimacy of clinical trials and conducting such a comparison, it requires a cleansing and soul searching dedication on the part of the investigators to recognize that their hunches, while legitimate, do not

strategy or even inferior to it. I need only mention the trials conducted with regard to beta-carotene among smokers where patients were randomized to beta-carotene or a placebo. It seemed that it would be a slam-

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No. at Risk	347	343	339	308	281	233	185	134	89
Radical prostatectomy	347	343	339	308	281	233	185	134	89
Watchful waiting	348	346	337	302	275	231	185	121	82

Cumulative Hazard Rate of Death from Prostate Cancer

uniformly represent the best currency for patient care. The art of medicine is important and undisputed, but it cannot substitute continuously for the science of medicine and the so called evidence-based rather Gestalt-based therapy direction and decisions. There are a number of instances in medicine where what seemed obviously beneficial when placed to the test of a clinical trial was either an equivalent to another

dunk outcome that the beta-carotene patients would fare more favorably. In fact, they did not. In fact, they were disadvantaged by beta-carotene consumption. A recent trial showed that Vitamin E, often considered of a great benefit for cardiac disease, actually reduced the benefit of statin drugs so frequently prescribed for patients with cardiac risk factor. On the other hand, the aspirin

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Travels in Search of New Horizons in Urologic Oncology

By John W. Davis, M.D.

Flying into Houston's Hobby airport, you can look out of the window shortly before landing and see a cluster of towering buildings that look like downtown Norfolk. However, this is not downtown Houston, for the real downtown is a much larger collection of skyscrapers located a 10-minute drive north. Instead, this is the famous Texas Medical Center, containing two medical schools, several public and private hospitals, nursing schools, a heart center, and, most significant for me, my employer for the next year, the University of Texas M.D. Anderson Cancer Center.

Over the past 18 months, I've traveled from Norfolk to Houston to Germany and back to achieve specialized training in urologic oncology and laparoscopic surgery. In June 2001, I had just finished seven years of training in Norfolk, during which I completed a urology residency at Eastern Virginia Medical School under the direction of Paul Schellhammer, M.D., and a prostate cancer research fellowship at the Virginia Prostate Center under the direction of George Wright, Ph.D. It was time to move on to a famous cancer center for a clinical fellowship in urologic oncology.

M.D. Anderson is a truly unique institution, rivaled only by the Memorial Sloan-Kettering Cancer Center in New York. The Center's teaching hospital trains doctors, nurses, and ancillary services personnel. Basic science departments are dedicated to cutting-edge research. Numerous clinical trials are available to patients along with the three mainstays of cancer treatment: surgery, chemotherapy and radiation therapy. Doctors tend to be "super-specialized," such as medical oncologists who treat only prostate cancers. The faculty at the Genitourinary Cancer

Center includes 8 urologists, 11 medical oncologists, 2 radiation oncologists, and expert support from pathology and radiology departments.

The fellow's experience at M.D. Anderson is quite intense. For three days a week, we assist with surgical procedures such as radical cystectomy, radical prostatectomy, radical nephrectomy, partial nephrectomy, and retroperitoneal lymph node dissections for testis cancer. The other two days, we are in the clinic seeing patients before and after surgery. The mixture of patients is quite diverse: approximately 30% are from the Houston area, while the majority travel a great distance--some from other countries. The fellows in urologic oncology are also diverse, coming from all over the United States, Israel, Pakistan, Ireland, and Puerto Rico. By the end of the year, I had significant experiences with the surgical and comprehensive management of complex urologic oncology patients. Equally important, many friends and future colleagues were made.

Along came June 2002, and it was time to move again--this time to Germany!

The M.D. Anderson experience was predominately traditional open surgery. However, in the last 10 years, a minimally invasive technique called laparoscopy has advanced to include urologic oncology procedures such as nephrectomy and prostatectomy. With laparoscopy, small keyhole-size incisions are made in the patient instead of the standard large open incision. A camera is inserted through one port to view the procedure on a television monitor, and the remaining ports are used for small instruments to perform the procedure. Laparoscopic procedures have been shown to produce less pain, less blood loss, and faster recovery. Laparoscopy recently received publicity when a nationally recognized

Hampton Roads resident underwent a successful laparoscopic prostatectomy. Fortunately, our department has a connection with a German hospital that is very advanced in laparoscopic surgery--the CharitÈ Hospital in Berlin. Readers of our newsletter may recall that one of the CharitÈ surgeons, Dr. Ingolf Tuerk, came to Norfolk in 2001 to train Dr. Michael Fabrizio in laparoscopic radical prostatectomy. Now it was my turn to be trained, but this time at his hospital in Berlin.

The CharitÈ experience was an intense and quick study in laparoscopic techniques. I was participating in laparoscopic procedures nearly every day. When free time was available, I performed chart reviews and was involved in four clinical research projects dealing with laparoscopic prostatectomy, laparoscopic retroperitoneal lymph node dissection for testis cancer, and laparoscopic cystectomy for bladder cancer.

Now that I have returned to Virginia and started practice with Devine-Tidewater Urology and the Virginia Prostate Center, my goal will be to combine the best of both of these fellowships that have trained me in both open and laparoscopic surgery. Tremendous support from my colleagues is also available. Michael Fabrizio is a fellowship-trained laparoscopic surgeon and has been performing laparoscopic prostatectomies for the past two years and nephrectomies for the past four years. Drs. Donald Lynch and Robert Given are both fellowship trained in urologic oncology and will lend their practice experience. As with the M.D. Anderson multidisciplinary approach to cancer care, I will be able to call on my many outstanding colleagues in radiation oncology, medical oncology, diagnostic radiology, and pathology to offer the best of urologic cancer care right here in Hampton Roads. ■

Benefits of surgery

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trial points to the other side of the coin; namely the debate as to the benefits of aspirin vs. placebo with regard to cardiac disease. As we all know, aspirin is remarkably beneficial in reducing cardiac events and has become the gold standard for cardiac disease prevention.

How is the information from the Scandinavian trial to be interpreted? As the graphs portray, there is a decrease in prostate cancer progression of about 14% and prostate cancer death of approximately 4% at the 6-8 year follow up interval. These numbers are statistically significant - namely they are very unlikely to be secondary to chance but are with greater than 95% certainty secondary to the effect of the surgical procedure. If one looks at relative benefit, the statement is certainly true that there is a 50% reduction in progression and prostate cancer death. This relative figure is more dramatic than the absolute figures of 8% and 4% and demonstrates, to some degree, that "spin" can be used to either minimize or exaggerate outcomes. Both concepts are important; specifically the concept that the progress in cancer is rarely made with huge leaps and bounds but more frequently by halting baby steps of progress. Against the background of these improvements one must factor in the side effects of the therapy, the number of patients that need to be treated to provide a cure for one patient and so forth. These issues are addressed in Quality of Life assessments and consumption of resource analyses.

Now that a clinical trial demonstrates benefit for radical prostatectomy, a number of directions will be pursued. These will include better identification of those patients for whom the treatment is destined to be successful, for instance by analysis of the individual genome or proteome of host and cancer, the avoidance of treatment for those in whom it is unlikely to be successful, the minimiza-

tion of side effects to include the risk/benefit ratio, all for the realistic tailoring of treatment that will allow the widest application to the greatest population at a cost that will not undermine other health care initiatives.

President Nixon in 1971 declared a "war on cancer" with the establishment of the National Cancer Centers and Health Care Act. He addressed a challenge similar to what John F. Kennedy proposed a decade earlier; namely within 10 years to place a man on the moon. As daunting as space travel challenges might be, the challenge to unravel the mechanisms of cancer and solve these mechanisms has been even more daunting. However, 30 years after the National Cancer Act, slow progress but nevertheless progress -- is being made.

Finally and philosophically the term "war" on cancer deserves some reflection. "War" implies conflict and subsequent victory or defeat. In life we encounter circumstances which are uncomfortable and individuals who are disagreeable. These facts don't speak for eradication. We learn to accommodate and relate to produce better interaction albeit never perfect harmony. And so might we better view the encounter with cancer as less of a "war" than an accommodation. To do otherwise certainly diminishes the many individuals with cancer who do not totally overcome their disease, are not cured, but learn to accommodate, to live with cancer, and continue to appreciate, often more fully, their environment, friends and family. ■

Volunteers Needed:

Men age 40 and older who have a diagnosis of prostate disease (prostatitis, benign prostate hyperplasia or prostate cancer), and men who do not have prostate disease are needed to donate body fluids for the SELDI Biomarker study. A compensation for the donation will be provided.

Those interested should call 757-446-7910.

Prostate Cancer Prevention Trial Open for Enrollment

SELECT trial offers free prostate cancer screenings

A new clinical trial called SELECT is now available for men interested in early detection and prevention of prostate cancer. Prostate cancer is the most common cancer in men and the second leading cause of cancer-related deaths. Early detection of prostate cancer is important to maximize the chance of cure. Prevention of prostate cancer is the next logical step.

Men enrolling in the SELECT trial (Selenium and Vitamin E Cancer Prevention Trial) will be carefully screened for prostate cancer on a yearly basis for the next 7-12 years with a blood test called PSA and a physical exam of the prostate. These two screening tests are the best methods for early detection of prostate cancer. Participants will also be asked to take two pills a day, which test whether or not the naturally occurring substances Selenium and/or Vitamin E can prevent prostate cancer. Preliminary evidence has suggested that Selenium and Vitamin E supplements might prevent prostate cancer, but a large clinical trial such as SELECT is necessary to prove this. Since both supplements are natural, the risks of side effects are extremely low.

The trial seeks to enroll men 55 years of age or more, who are in good health with no evidence of cancer. Since African Americans have a higher rate and mortality from prostate cancer, such participants can enroll at age 50. The SELECT trial is a nationwide cooperative trial sponsored by the National Cancer Institute, and the goal is to recruit more than 38,000 participants.

Anyone who is interested or knows someone who might be interested is encouraged to call 668-2779 for more information. In addition, we can arrange speaking engagements from representatives from the trial for interested civic and community groups. ■