

ROBOTIC RADICAL PROSTATECTOMY COMES TO DUKE

Even though radical prostatectomy remains the gold standard for the treatment of localized prostate cancer, the radical retropubic prostatectomy (RRP) and radical perineal prostatectomy (RPP) are still associated with significant side effects. Both of these operations have become far less morbid with the extensive experience of urologists around the world. Improvements in transfusion rates, hospital stay, recovery time, erectile dysfunction rates, and urinary incontinence rates have been remarkable, but they remain significant enough that many patients are pursuing less invasive options.

Laparoscopic radical prostatectomy (LRP) was first attempted in the early 1990's and was abandoned because it was found to be technically too demanding. This was especially true when it came to the reconstructive aspect of the procedure. It wasn't until the mid 1990's that a few European institutions established LRP as a feasible surgical approach. Centers in the United States then began to reassess the viability of this technically demanding procedure and validated the findings in France. Most of these centers came to the same conclusion that LRP was feasible and offered significant benefits to patients once the surgeon made it through the initial learning curve. The advantages of the

procedure included decreased blood loss, decreased transfusion rates, decreased pain medication use, and improved recovery times and they occurred while preserving equivalent oncologic results. In addition, some centers have reported improvements in urinary continence and erectile dysfunction rates with LRP. It is the initial learning curve of LRP that has been a topic of extensive debate, with many feeling that the technical difficulty of this operation restricts its widespread applicability.

Robotic Radical Prostatectomy (RobRP) may be the answer to the technical challenges presented by LRP. This

procedure is performed in the same way as the LRP but with the assistance of a daVinci robotic surgical system (Intuitive Surgical, Inc., Mountain View, CA). This system has revolutionalized the way that some centers are approaching minimally invasive urology around the world. It allows the surgeon to perform the operation while sitting at a console. This console is equipped with 3-dimensional visibility, allowing for precise anatomical identification of key structures, including small blood vessels and the nerves that drive erectile function. The surgeon also controls two



Dr. Albala at the controls

robotic arms that have a full range of motion, allowing for much easier dissection and reconstruction as compared to standard laparoscopy. In addition, the reconstruction performed with the robot is superior to the reconstruction performed during open surgery. There is no question that the robot provides tremendous advantages to the surgeon in terms of ergonomics and surgeon exhaustion, which allows him to focus completely on the operation without the physical demands that come with LRP. The surgeon is also assisted by a laparoscopic surgeon at the bedside as well as a surgical nurse.

(Continued on next page)

ROBOTIC RADICAL PROSTATECTOMY continued

Since coming to Duke just two years ago, Dr. David Albala has managed to bring laparoscopic urology into the mainstream at Duke University Medical Center. Along with his team, Dr. Albala has performed over 200 laparoscopic urologic operations. These have included nephrectomies, nephroureterectomies, partial nephrectomies, pyeloplasties, cyst decortications, and other renal and ureteral reconstructive procedures. Together, with the rest of the Duke Urology faculty, he continues to build an allinclusive minimally invasive urologic center that is focused on innovative treatments for all urologic diseases. His extensive laparoscopic experience has proven invaluable for the initiation of the Robotic Prostatectomy program at Duke University Medical Center. Initial patient feedback has been excellent, with the first patient being discharged just one day following surgery.

Dr. Albala is Co-Director, together with Dr. Glenn Preminger, of the Laparoscopic and Endourologic Fellowship Program here at Duke. Their current Fellows are Dr. Yeh Hong Tan, Dr. James O. L'Esperance, and Dr. W. Patrick Springhart, who all bring vast laparoscopic experience and interest to the program, which has been invaluable in the birth of the robotic prostatectomy program. Duke University Medical Center is now one of the few centers in the country offering all surgical options to prostate cancer patients.

"Urologists are becoming increasingly skilled in minimally invasive techniques to treat cancer. These advances underscore the need to merge the unique skills and perspectives of the endourologist and urologic oncologist. With the marriage of laparoscopy and oncology in daily practice, we may soon witness the birth of laparoscopic urologic oncology as a new sub-specialty."

 From Leonard Gomella's Editorial: Laparoscopy and Urologic Oncology – I Now Pronounce you Man and Wife. J Urol 169: 2057-2058, 2003.

PROSTATE CANCER FORUM: BREAKING NEWS

by Philipp Dahm, M.D., Assistant Professor, Duke Urology

The Role of Finasteride in the Prevention of Prostate Cancer

A recent article published in the New England Journal of Medicine suggests that Finasteride may have a potential role in the prevention of prostate cancer (*N Engl J Med* 349(3): 215-224, 2003). In this headline-making article Thompson et al. report the findings of a prospective placebo-controlled clinical trial that randomly assigned 18,882 men to treatment with Finasteride (5 mg daily) or placebo for the duration of seven years. They found that significantly lesser patients in the Finasteride group compared to the placebo group (18.4% versus 24.4%) were diagnosed with prostate cancer. Additionally, among those patients diagnosed with prostate cancer, a high Gleason score disease (Gleason score > 7) was twice as common in the Finasteride than the placebo group (37.0% versus 22.2%). The reason behind the increased prevalence of high grade disease in the Finasteride group remains poorly understood. Gleason scoring bias, the induction of high grade disease or the selective inhibition of low-grade tumors may all play a role. The study fails to answer the question whether Finasteride indeed prevents prostate cancer or merely delays or alters its presentation. Pending further evidence, it appears prudent to caution patients against an

indiscriminate use of Finasteride as an agent to reduce the risk of prostate cancer.

Detection of Lymph Node Metastasis by MRI with Nanoparticles

A further noteworthy paper in the same journal recently reported on a new imaging modality for detecting lymph node involvement in patients with prostate cancer (N Engl J Med 348(25): 2491-2499, 2003). Magnetic resonance imaging (MRI) with lymphotropic superparamagnetic nanoparticles was performed in 80 patients who subsequently underwent formal pelvic node dissection. Thirty-three patients (41%) were found to have positive nodes that were all preoperatively identified using this enhanced MRI technique. The sensitivity of identifying a single positive node by MRI with nanoparticles was vastly superior to MRI alone (90.5% versus 35.4%). The positive predictive value of identifying a positive individual lymph node was 95.0%. The authors suggest that MRI with nanoparticles may - if these results are confirmed in a larger study – provide important preoperative staging information that may make staging node dissection unnecessary in select patients.

DUKE UROLOGY SAYS FAREWELL TO TWO OF ITS FINEST

After six years of service to Duke Urology, Dr. John S. Wiener has accepted a position as Chief of Urology at the University of Mississippi Medical Center. Dr. Wiener joined our faculty in 1997 after completing his undergraduate studies and urology residency at Duke and a fellowship with Dr. Edmond Gonzales at Texas Children's Hospital. Upon his return to Duke, Dr. Lowell King retired after a distinguished career as Head of Pediatric Urology and Dr. Wiener assumed his position. Since that time, he has given countless hours of devotion to expanding the clinical practice of pediatric urology at Duke to its current level. Dr. Wiener's commitment to patient care, presented with genuine caring, and his energetic, well-rounded approach to life will be greatly missed.

During a celebration at the Searle Center on May 19, 2003, friends, family, and co-workers gathered to celebrate the retirement of Gloria Perry, R.N. after 35 years of service to Duke. Gloria's career began in 1968 when she joined the Urology Clinic as a Staff Nurse. In 1972, Gloria was promoted to Head Nurse of the clinic and in 1975 she received an appointment as Urology Nurse Clinician. The remainder of her career at Duke was spent with the Department of Advanced Practice Nursing.



Dr. Wiener crowns Gloria Perry, "Queen of Cath"

Friend and co-worker, Beth Stewart, Director of Advanced Practice Nursing says of Gloria, "She has literally touched the lives of thousands of patients and families through her remarkable clinical expertise, her tender touch, her excellent teaching, and her compassion as she's helped many cope with and adjust to life-altering and body-changing procedures. Her patient's have described her as a "gift from God." Talk with her for even a few minutes and you'll find one of the most unassuming, deeply spiritual, caring individuals, not just in nursing but on this earth."

UROLOGY RESIDENCY TRAINING PROGRAM Highlights

2003 Duke Urology Graduates



Pictured left to right: Dinesh S. Rao, MD, Ning Z. Wu, MD, Ph.D., Bertram A. Lewis, Jr., MD, Ph.D, and Jeffrey J. Sekula, MD

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ADDITIONAL RESIDENT HONORS AND AWARDS

Costas D. Lallas, M.D. received the Pfizer Scholar Award.

Jeffrey J. Sekula, M.D., Fernando C. Delvecchio, M.D. and Costas D. Lallas, M.D. received Academic Achievement Awards.

Ganesh V. Raj, M.D., Ph.D. received 2nd place for "Excellence in Urological Clinical Case Presentation" at the Annual Carolina Urology Resident Seminar.

Alon Z. Weizer, M.D. received 3rd place for "Excellence in Urological Research Case Presentation" at the Annual Carolina Urology Resident Seminar.

DUKE HEALTH CENTER MOVES TO NEW LOCATION

Duke Health Center, formerly known as the Duke Community Urology Center, has moved to a new location at 3116 North Duke Street in Durham. Duke urologist's Thomas J. Polascik, M.D. and Brian C. Murphy, M.D. are Co-Directors of this specialty practice that was established in 1998 to provide urological evaluation and treatment to the Durham community. Hours of operation are Monday thru Friday from 8:30 am to 5:00 pm. Appointments can be scheduled by calling (919) 684-2446.



Duke Health Center 3116 North Duke Street Durham, NC 27704 Phone: 919-660-2200

Kudo's

Cary N. Robertson, M.D., Associate Professor of Urology and **John S. Wiener, M.D.**, Associate Professor of Urology and Assistant Professor of Pediatrics were named "Top Doctors in Urology for the Triangle Area" in the July 2003 issue of *Business North Carolina*. Information for this listing was compiled by a non-profit research organization that sent questionnaires to nearly all physicians in the Charlotte, Triad and Triangle areas of the State. Each physician was asked to recommend the specialists they would consider as "most desirable for care of a loved one." The doctors chosen were named by the largest numbers of their peers.

Wendy Demark-Wahnefried, Ph.D., Associate Professor of Urology, received the 2003 Komen Professor of Survivorship Award from the Susan G. Komen Breast Cancer Foundation. Established in 1999, this award recognizes and rewards efforts and achievements that improve the overall quality of life for breast cancer survivors.

The **Urology Clinic Staff** was one of four Duke outpatient clinics recognized during National Patient Advocacy Week (April 13-18, 2003) for their outstanding team approach in creating excellent patient service and patient advocacy.

2003 HAND ACCESS LAPAROSCOPIC NEPHRECTOMY TRAINING SEMINARS

Duke University Medical Center
Durham, NC
Course Director: David M. Albala, M.D.
Professor of Urology



- ➤ April 18
- ➤ May 2
- ➤ June 6 (Advanced Hand-Assist procedures)
- ➤ July 12
- ➤ August 8
- ➤ September 12
- ➤ October 10
- November 21
- ➤ December 5 (Advanced Hand-Assist procedures)

For further information or to register for the course, please contact:

Allison Benjamin

Applied Medical • 22872 Avenida Empresa • Rancho Santa Margarita, CA 92688 (800) 642-2820, Ext. 8429

FUTURE CONFERENCES

9/16/03 Duke Tuesday in Urology Guest Lecturer: 1:00-6:00 pm Searle Conference Center Dr. Edmond T. O

Searle Conference Center Dr. Edmond T. Gonzales
Texas Children's Hospital

Houston, Texas

12/9/03 Duke Tuesday in Urology Guest Lecturer:

1:00-6:00 pm Searle Conference Center Dr. Joseph A. Smith, Jr.

Vanderbilt University School of Medicine Nashville, Tennessee

1/31/04 Winter Urologic Forum Grand Summit Resort thru 2/7/04 and Conference Cente

and Conference Center The Canyons

Park City, Utah

3/9/04 Duke Urologic Assembly St. Kitts Marriott Royal Resort thru 3/14/04 St. Kitts, British West Indies

For more information, please call us at (919) 684-2033 or visit our website: www.dukeurology.com

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