

The Ambulatory Urology Symposium *cont from pg 4*

The World Health Organization/International Society of Urological Pathology observes that carcinoma high-grade, carcinoma low-grade and carcinoma in situ can be malignant, whereas urothelial papilloma, papillary urothelial neoplasm of low malignant potential and dysplasia are not malignant. Yet all of these entities fall under the term “superficial.”

The term has little bearing in determining a course of therapy. A patient is considered at low risk for progression if his or her initial tumor was low-grade Ta and the recurrent tumor is also low-grade Ta. However, if the initial tumor is high-grade T1, removed by TUR followed by intravesical bacillus Calmette Guerin (BCG), and the subsequent tumor is high-grade T1, the risks of progression are significant. A scan of the literature shows that the risk of progression for low-grade Ta is less than 2.5%, whereas the risk of progression for high-grade T1 lesions is 45% to 52%.

We are perhaps all too casual with the term “superficial.” It should be put on the shelf and left to history when we are talking to colleagues, trainees and patients. We should be as precise in our language as we are with our scalpels.

Negative Biopsies in the Prostate

Samir S. Taneja, M.D., Associate Professor of Urology, Director of Urologic Oncology, New York University School of Medicine

The patient with elevated PSA but a negative biopsy can be a quandary. In most instances, cancer is diagnosed within

the first 12 cores of sampling, but persistent elevation of the PSA can lead to continued concern. One means of determining whether to re-biopsy is to follow PSA velocity. We feel that a 20% rise from baseline in a year is sufficient evidence to warrant a repeat biopsy.

The patient whose biopsy shows high-grade prostatic intraepithelial neoplasia (PIN) presents another problem. In our initial study of these clinical findings, we looked at 619 men who had recently undergone 12-core biopsies. Of these, some 103 were diagnosed with high-grade PIN and, of these, 43 underwent a repeat biopsy within a year. Only one patient (2.3%) of this sample was found to have cancer. This suggests that an immediate repeat biopsy in these men is unnecessary.

Ruling out immediate repeat biopsies in men with high grade PIN raises the question as to when to conduct the next biopsy. We addressed that issue with a study of 31 men who underwent a follow-up biopsy three years after an initial 12-core biopsy found high-grade PIN. Close to 26% of these men were diagnosed with prostate cancer, 35% showed high grade PIN only and 39% had no disease. Of the men diagnosed with the disease, 48% had less than a 1.0 unit increase in serum PSA. Univariate analysis showed that a change in PSA was not necessarily associated with a diagnosis of prostate cancer.

Urology News

Glickman Urological Institute

IN THIS ISSUE:

Inside Cover Letter from the Chairman

Inside Cover New Staff Member: Andrew J. Stephenson, M.D.

1 Cleveland Clinic Hosts 2006 World Congress of Endourology

2 – 4 The Ambulatory Urology Symposium: Changing the Face of Urology
Urodynamic Testing
Prediction Models in Urological Practice
Chemoprevention of Prostate Cancer
Management Strategies for Noninvasive Bladder Cancer
Negative Biopsies in the Prostate

4 Inderbir Gill, M.D., Speaks at Arab Health Conference

5 Andrew C. Novick, M.D., Festschrift and Distinguished Chair

5 Upcoming Conferences and Preceptorships



Andrew C. Novick, M.D.

Chairman, Cleveland Clinic
Glickman Urological Institute

Professor of Surgery

Associate Dean for Faculty Affairs
Cleveland Clinic Lerner College
of Medicine of Case Western
Reserve University

Dear Colleague:

It is my pleasure to present the spring issue of *Urology News*, which focuses on this year's courses and conferences, including the 24th World Congress of Endourology and the Ambulatory Urology Symposium, both of which are being hosted by Cleveland Clinic.

As we look forward to the opportunities 2006 will bring, we also reflect on the fact that 2005 was an exceptional year for the Glickman Urological Institute. Our 62 physicians and scientists contributed 206 scientific publications to peer-reviewed medical journals (visit clevelandclinic.org/urology for a complete listing) and are currently working on 106 clinical research studies and 29 laboratory research projects. Our faculty members share a passion for discovery and a deep commitment to providing the best clinical and investigative training for our residents and post-graduate fellows, and we look forward to furthering the field of urology in 2006.

The new Glickman Tower (see renderings below) will provide us with the expanded resources to do just that. Last year, Cleveland Clinic approved the construction of a new building on our main campus. The 10-story Glickman Tower will incorporate several disciplines, including the Glickman Urological Institute. The institute will be located on the top four floors of the building and consist of a procedural floor, clinical exam rooms and teleconferencing rooms capable

of broadcasting live surgeries and presentations. The planned completion date is fall 2008. The Glickman Tower will be conjoined with the new Heart and Vascular Institute, which is now being constructed.

2006 also brings a change in the leadership team of the Glickman Urological Institute as Inderbir S. Gill, M.D., and J. Stephen Jones, M.D., have been named co-vice chairmen for the institute. Drs. Gill and Jones are committed to continuing the institute's mission of providing the highest quality of care for adult and pediatric patients with complex urological disorders. Jonathan Ross, M.D., vice chairman since 2001, has stepped down from the position in order to dedicate more time to pediatric urology. And we congratulate Steven C. Campbell, M.D., who has been named associate residency program director for the institute.

We appreciate your interest in *Urology News* and look forward to seeing you at the upcoming conferences.

Sincerely,

Andrew C. Novick, M.D.
*Chairman, Cleveland Clinic
Glickman Urological Institute
Professor of Surgery
Associate Dean for Faculty Affairs
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Urology News is written for physicians and should be relied upon for medical education purposes only. It does not provide a complete overview of the topics covered and should not replace the independent judgment of a physician about the appropriateness or risks of a procedure for a given patient.

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New Staff Member

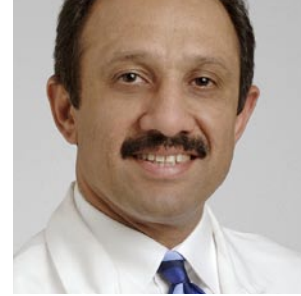
Andrew J. Stephenson, M.D.,

recently joined the Glickman Urological Institute. He completed both his surgical and urology residency training at McGill University, Montreal, Quebec, Canada. Dr. Stephenson completed a fellowship in urologic oncology and laparoscopy at Memorial Sloan-Kettering Cancer Center in New York. He specializes in prostate, bladder, testis and kidney cancers, urinary diversion and robotic prostatectomy.



Cleveland Clinic Hosts 2006 World Congress of Endourology

Inderbir S. Gill, M.D., M.Ch.,
Co-Vice Chairman, Glickman Urological Institute
President, 2006 World Congress of Endourology



Inderbir S. Gill, M.D.

We are excited to host the 24th World Congress of Endourology (WCE). This year's WCE will be held at the Inter-Continental Hotel and Conference Center on the Cleveland Clinic campus. Please mark your calendars for the conference, which will be held August 17 – 20, 2006.

Over the years, the WCE has steadily expanded in scope and format, so much so that it now includes minimally invasive oncology, laparoscopic surgery, endourology, female urology, and minimally invasive lower tract surgery including BPH. WCE is truly synonymous with minimally invasive urology.

An exciting program has been developed for the 2006 meeting, which includes five "first-time-ever" highlights:

1. Live Surgery Modules: Typically during a live surgery demonstration, the attendee is able to observe only one technique performed by one surgeon. Our novel module concept is likely to optimize acquisition of surgical skills as the attendee will become familiar with all the viable techniques for laparoscopic and robotic radical prostatectomy available today. The format of this three-hour session will include observation of a live surgery (e.g., laparoscopic radical prostatectomy) for the initial hour, with the remaining two hours dedicated to seven to eight different techniques involved in the same operation, presented by internationally renowned surgeons.

2. Virtual "V" Posters: We are introducing "V" posters, a unique concept making its debut during the 2006

WCE. "V" posters are electronic "posters" displayed on state-of-the-art large-screen plasma LCD monitors. Thus, the traditional poster text will be presented simultaneously with videos, imaging and/or animation showing surgical techniques. Data can be presented in a picture-in-picture format. We believe these "V" posters will elevate the platform for scientific interaction.

3. Robust pre-WCE "Hands-on"

Laboratories: Seven different "hands-on" laboratory sessions are being offered in the following categories: basic laparoscopy (focus: kidney, adrenal, suturing); advanced laparoscopy (focus: radical prostatectomy); advanced laparoscopy (focus: radical cystectomy with urinary diversion); advanced laparoscopy (focus: partial nephrectomy, pyeloplasty); endourology: ureteroscopy/percutaneous surgery (focus: percutaneous renal access, endopyelotomy, flexible ureteroscopy); BPH; simulators and inanimate models for intracorporeal suturing. These "hands-on" sessions are specifically designed to maximize skills transfer to the attendees.

4. Discounts for Residents and Fellows

Worldwide: Compared to the standard registration fee of \$500, residents and fellows can register for only \$100. Hotel accommodations are also heavily discounted. As such, we expect the largest turnout of residents and fellows of any WCE to date. In fact, early registrations are already at an all-time high.

5. Post-WCE International Live Surgery

Program: Immediately following the WCE, the Cleveland Clinic Glickman

Urological Institute is holding a week-long International Live Surgery Program from August 21 – 25, 2006. This program is being offered free of charge to any urologist who has registered for the WCE. Covering the entire field of operative urology, this intensive program will demonstrate more than 25 full-length live surgical operations in a comprehensive, interactive format. All urologic subspecialties ranging from adrenal surgery to urethral reconstructive surgery will be presented. We will focus on technical nuances and subtleties of basic and advanced open and minimally invasive operative surgical techniques. The goal is to provide urologists with instruction that will benefit their daily practice of urology.

The logistical support and infrastructure of Cleveland Clinic stands ready to support the various scientific programs planned. Approximately 1,500 urologists from the United States and 50 countries are expected to attend. The welcome reception will be held in the internationally renowned Rock and Roll Hall of Fame and Museum.

We are excited about this year's WCE. We are privileged to welcome old friends and make new ones in the setting of a beautiful, scientifically stimulating environment.

For more information on the World Congress, visit: 2006WCE.com.



J. Stephen Jones, M.D., F.A.C.S.
 Co-Vice Chairman, Glickman Urological Institute
 Medical Editor, *Urology News*

The Ambulatory Urology Symposium: Changing the Face of Urology

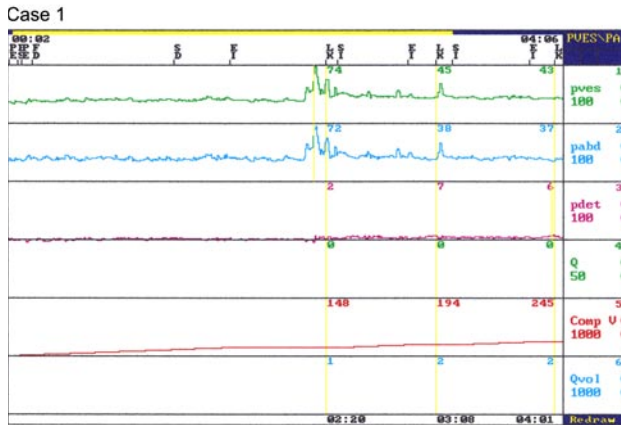
At the Glickman Urological Institute, we derive immense satisfaction from offering educational opportunities devoted to the newest, most innovative and most far-reaching techniques and technologies. But we have not lost sight of the fact that the majority of urologists' work involves common conditions – and these conditions still merit state-of-the-art care. Thus, we will welcome many of you to Cleveland Clinic April 7 and 8 for the Ambulatory Urology Symposium.

For the symposium, we have assembled a panel of nationally recognized speakers to address the topics most frequently encountered in everyday practice, including ambulatory oncology, practice issues and management of benign conditions such as incontinence and BPH. Our goal is to mirror our endeavors in the most complex areas of urology: defining the state-of-the-art and working with our colleagues across the country to assure that all are provided the most up-to-date information available in our field. As you know, this information changes often.

Following is a sampling of presentations from some of our speakers. We look forward to seeing you in April.

J. Stephen Jones, M.D., F.A.C.S.
 Co-Vice Chairman, Glickman Urological Institute

For more information or to register for the conference, which will be held at the InterContinental Hotel and Conference Center on the Cleveland Clinic main campus, e-mail Cindy Kepp at keppc@ccf.org.



Urodynamics tracing in a patient with bladder dysfunction.

Urodynamic Testing Sandip Vasavada, M.D., Co-Head, Voiding Dysfunction and Female Urology, Cleveland Clinic

An estimated 13 million Americans experience incontinence, which is more prevalent in women than men. The Agency for Health Care Policy and Research says that one in four women between 30 and 59 years old has experienced the problem and it is more prevalent in older people. Some 35% of women over 65 have incontinence compared to 22% of men. In short, incontinence is a common problem and will account for a significant number of office visits that can be expected to increase as the population ages.

Stress, urge and mixed incontinence account for 90% of the cases a urologist might expect to diagnose. The majority of these cases will be diagnosed in the office after a careful and comprehensive history that should be followed by a thorough physical examination that attempts to reproduce the incontinence described by the patient. The cough stress test requires that a patient's bladder be filled, but not to the point of discomfort. The patient is then asked to

cough, push or duplicate the activity associated with the incontinence. Urinalysis can identify acute urinary tract infection and diabetes-induced glycosuria, both of which can cause or aggravate urge incontinence. At this point, a treating physician may have enough information for a presumptive diagnosis of the type of incontinence a patient is experiencing.

Urodynamic testing should be employed as an adjunct to, not a substitute for, a careful history and physical examination. This is especially important when surgery is being considered. The value of urodynamic testing lies in the observation that the success of therapy depends upon the accuracy of the diagnosis. Urodynamic testing is employed when the diagnosis is uncertain or the patient has mixed symptoms, when the patient has failed to respond to previous treatment, and when surgery is being considered.

Urodynamic testing may include one or more of the following tests: cystometry to measure bladder pressure, uroflowmetry to assess flow rates, and a leak point pressure measurement to evaluate sphincter function.

Although a comprehensive history and physical exam have a high degree of sensitivity to the varied incontinence presentations, advanced testing can, on occasion, change a diagnosis and subsequent approach to treatment. Even when the testing confirms a presumptive diagnosis and no surgery is required, it provides information that a physician can translate and transmit to the patient.

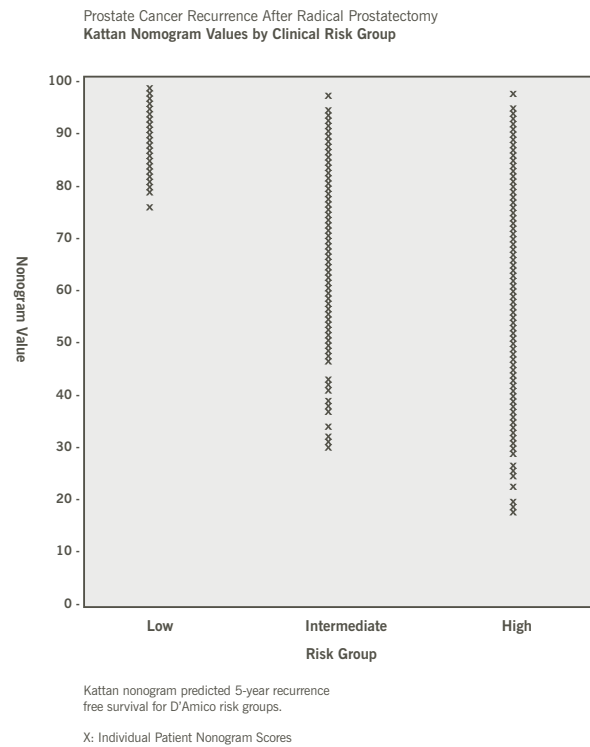
Prediction Models in Urological Practice

Andrew J. Stephenson, M.D., Cleveland Clinic

Being able to apply tools and skills to fashion a reliable prognosis for the individual patient is essential to evidence-based medicine and making informed decisions about treatments. Our ability to create an accurate prognosis is subject to influences and limitations that include a limited capacity to process multiple pieces of information and biases that color the evaluation of clinical evidence.

There have been numerous attempts over the years to reduce the effects of subjective observations. One approach identifies clinical parameters associated with the outcomes. Patient groups identified with these parameters are then classified according to risk: low-, intermediate- and high-risk. Risk groups may accurately predict the outcome for populations of patients with shared features but there is substantial heterogeneity within each group such that they do not perform as well when applied to the individual patient.

An alternative approach is to develop nomograms or artificial neural networks. These combine clinical



information to predict probability outcomes on a scale from 1-99%. Such predictions are clinically more meaningful for the patient and physician than simply assigning them to a low- or high-risk group. While these models are more complicated to use compared to simply counting risk factors, this added complexity results in superior predictive accuracy.

Computing outcomes for individual patients using the paper form of these models is tedious and time-consuming for the individual physician, making them impractical tools to use in the clinical setting. However, with the development of free, downloadable program software for desktop PCs and handheld computers such as BlackBerry and Palm Pilot, they can be completed in nanoseconds, which has greatly facilitated their use in clinical practice.

Clinical judgment remains at the center of prognostic and therapeutic decisions. Clinicians should avail themselves of all possible information to include that provided by predictive models. The models are available in the public domain for free download at nomograms.org or search "prostate cancer nomograms."

Chemoprevention of Prostate Cancer

Eric Klein, M.D., Head, Urologic Oncology, Cleveland Clinic

A number of factors make prostate cancer an attractive target for chemoprevention. It is ubiquitous - the lifetime risk of disease is 17.6% in Caucasians and 20.6% in blacks. The majority of those who develop metastatic cancer will die of the disease. There is also a significant amount

The Ambulatory Urology Symposium *cont from pg 3*

of treatment-related morbidity, such as impotence and urinary and bowel problems. A strategy that effectively prevents the disease would spare many men this “burden of cure.”

Trials and studies have identified a number of agents that appear to have preventive properties. Among these are finasteride and dutasteride, both 5-alpha-reductase inhibitors, nonsteroidal anti-inflammatory drugs (NSAIDs), selective estrogen receptor modulators (SERMs) and certain so-called phytotherapeutics and naturally occurring compounds. These include selenium, vitamins E and D, soy, lycopene and green tea.

Finasteride’s preventive properties are seen in findings from the 18,882-man Prostate Cancer Prevention Trial whose treatment arm evidenced a 24.8% reduction in the incidence of the cancer compared to placebo. Dutasteride has been shown to promote prostate cancer cell death in vitro and is in a major international trial with results expected in 2008.

A large-scale, randomized, placebo-controlled trial of vitamin E for prevention of lung cancer (the Alpha-Tocopherol Beta-Carotene Cancer Prevention Trial or ATBC) found a 32% reduction in incidence and a 41%

reduction in mortality in those men receiving the vitamin, and another trial in skin cancer suggested a similar benefit to selenium in reducing the incidence of prostate cancer. The 32,400-man Selenium and Vitamin E Cancer Prevention Trial (SELECT), which has prostate cancer as the primary endpoint, is expected to produce interim results this year and complete results in 2013. NSAIDs and SERMs, as well as the phytotherapeutics, continue to be the target of much research. It is likely an effective preventative regimen or regimens will be identified.

“Superficial Cancer” May Not Be An Accurate Term: Management Strategies for Noninvasive Bladder Cancer

Mark S. Soloway, M.D., Professor and Chairman, Department of Urology, University of Miami School of Medicine

Medical dialogue, whether between physicians or between a physician and patient, should be precise. The term “superficial bladder cancer” violates this dictum and, in doing so, may mask the seriousness of the disease. When used by urologists, the term indicates tumors that can be removed by transurethral resection (TUR). This meaning is too easily muddled by the colloquial use of the term, meaning “on the surface, shallow or unimportant.”

continued on pg 6

New Virus in Prostate Tumors Discovered

A team of researchers from Cleveland Clinic and the University of California, San Francisco, has discovered a new virus in prostate tumors. In a study of 150 men, the researchers identified the virus, called XMRV, and determined that it is 25 times more likely to be found in prostate cancer patients with a specific genetic mutation than men without the mutation.

Cleveland Clinic researcher Robert H. Silverman, Ph.D., previously discovered a gene called RNaseL that fights viral infections. Men with mutations in this gene are at greater risk for prostate cancer. Dr. Silverman said that although it can’t be said that

XMRV causes prostate cancer, the new study’s findings still are remarkable because of the association of the virus with the mutation.

The XMRV virus has never before been seen in humans, according to co-author Eric Klein, M.D., Head of Urologic Oncology at the Glickman Urological Institute. The results of the study he and Dr. Silverman conducted with UCSF scientists Joe DeRisi, Ph.D., and Don Ganem, M.D., are consistent with previous epidemiologic and genetic research that has suggested that prostate cancer may result from chronic inflammation, perhaps as a response to infection.

In their study, Cleveland Clinic and University of California researchers examined tissue samples of 86 prostate cancer patients whose prostates had been surgically removed.

Future research will examine patients’ sexual history, personal and family medical history and viral infections as they relate to prostate cancer. A full report of the discovery, co-authored by the researchers, is in press in the journal PLoS Pathogens.

Andrew C. Novick, M.D., Honored Twice

Colleagues honored Andrew C. Novick, M.D., for 20 years of distinguished service as chairman of the Glickman Urological Institute with a celebration in October. And recently, Dr. Novick again was honored with the establishment of a \$2 million education and research chair in his honor.

Andrew C. Novick Distinguished Chair in Urology

Funded with a lead gift of \$1 million from Cleveland businessman Carl D. Glickman and the generous donations of many urology patients, the Andrew C. Novick Distinguished Chair in Urology is dedicated to furthering patient care, research, education and outstanding physician leadership within the Glickman Urological Institute. Dr. Novick is the first physician to hold the chair, which will be held in perpetuity by the chairman of the institute.

Festschrift Tribute to 20 Years of Leadership and Service

More than 30 national and international physician leaders in urology gathered last fall for the celebration of Dr. Novick's 20-year career as chairman of the Glickman Urological Institute. The celebration included a bestowal by colleagues of a festschrift – a gold-bound volume of writings that paid tribute to his career. Dr. Novick's expertise includes the areas of renal reconstructive surgery, including nephron-sparing surgery, renal transplantation and renal revascularization. He is the only urologist to have served as chairman/president of the American Board of Urology, the National Urology Residency Review Committee and the American Board of Urology/American Urological Association Examination Committee.



Leading urologists from around the world gathered Oct. 7 to honor Andrew C. Novick, M.D., with a gold-bound volume of writings that paid tribute to his career. After a daylong scientific program, a celebratory dinner was held at the Ritz-Carlton in Cleveland.

Upcoming Conferences and Preceptorships

April 7-8, 2006

Ambulatory Urology Symposium:
Changing the Face of Urology

Symposium Director: J. Stephen Jones, M.D., F.A.C.S.

April 8, 2006

2nd Annual Urology/Gynecology Nursing Conference Defining
State of the Art

April 24-27, 2006

5th Annual National Urology Resident Preceptorship Program
(NURPP) in Female Pelvic Medicine and
Reconstructive Surgery

Program Director: Firouz Daneshgari, M.D.

August 17-20, 2006

2006 World Congress of Endourology

President: Inderbir S. Gill, M.D.

September 29-30, 2006

Living Donor Summit

Summit Director: David Goldfarb, M.D.

October 16-17, 2006

2nd Annual National Urology Resident Preceptorship
(NURP) in Adult and Pediatric Reconstructive and
Prosthetic Urologic Surgery

Program Co-directors:

Kenneth Angermeier, M.D.

Drogo Montague, M.D.

Jonathan Ross, M.D.

All conferences and preceptorships will be held at the InterContinental Hotel and Conference Center on the Cleveland Clinic main campus in Cleveland, Ohio. For more information on these events, e-mail Cynthia Kepp, Program Coordinator for the Glickman Urological Institute: keppc@ccf.org.