

Refractory Idiopathic and Neurogenic Detrusor Overactivity:

Case Studies of Localized Treatment Modalities

Saturday, May 14, 2011

Walter E. Washington Convention Center
Washington, DC

7:00 PM Program
8:30 PM Adjourn

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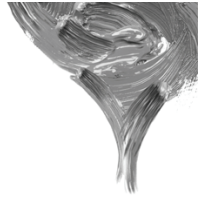
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Refractory Idiopathic and Neurogenic Detrusor Overactivity:

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SATURDAY, MAY 14, 2011
AGENDA

6:30 PM Registration and Dinner

7:00 PM Welcome and Introduction

Michael B. Chancellor, MD
Chairperson

7:05 PM *Defining Bladder Overactivity and Assessing
Treatment Outcomes*

Jonathan H. Watanabe, PharmD

7:30 PM *Optimizing Treatment Success Through Appropriate
Patient and Localized Therapy Selection:
Case Studies*

Victor W. Nitti, MD
Michael B. Chancellor, MD

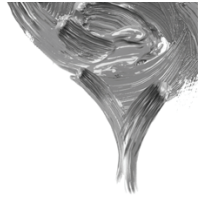
8:20 PM Interactive Q&A and Discussion

All Faculty

8:30 PM Adjourn

Refractory Idiopathic and Neurogenic Detrusor Overactivity:

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CHAIRPERSON

Michael B. Chancellor, MD

Director, Neurourology Program
Beaumont Hospital, Royal Oak
Professor of Urology
Oakland University William Beaumont School of Medicine
Royal Oak, Michigan

FACULTY

Victor W. Nitti, MD

Vice Chairman of Urology
Professor of Urology
New York University Langone Medical Center
New York, New York

Jonathan H. Watanabe, PharmD

Pharmaceutical Outcomes Research and Policy Program
University of Washington
Seattle, Washington

INTENDED AUDIENCE

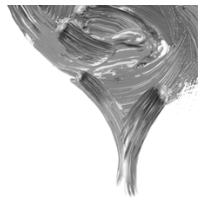
Urologists interested in refractory overactive bladder (idiopathic and neurogenic) attending the AUA 2011 Annual Meeting.

STATEMENT OF NEED

Overactive bladder (OAB) is among the 10 most common chronic medical conditions, affecting approximately 33 million adults (16.5%) in the United States. Many individuals with OAB do not seek medical care, and prevalence estimates vary considerably among studies from 3% to 43%. This wide variation in rates from epidemiologic studies is, in part, the result of differences in criteria applied; there is a clear need to create a standardized, validated operational definition of the condition. OAB remains vastly underreported by those who suffer from it because of a variety of factors. Sixty percent of respondents with symptoms indicated that they had consulted a physician, and only 27% were currently receiving treatment. The definition of successful treatment must encompass many components underlying OAB, patient satisfaction with treatment, and meaningful improvement in symptoms. Therefore, novel treatment options for OAB that may improve and optimize patient adherence to therapy continue to transform the treatment landscape and must be explored.

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EDUCATIONAL OBJECTIVES

At the conclusion of this activity, participants should be better able to:

- Differentiate between idiopathic and neurogenic overactive bladder (OAB)
- Identify neurologic disorders commonly associated with neurogenic OAB
- Measure treatment success utilizing objective and subjective improvements as outcomes for OAB
- Discuss long-term, localized treatment options for patients refractory to oral and behavioral therapies for OAB
- Select appropriate patients refractory to oral therapy who may benefit from long-term, localized treatment for OAB

ACCREDITATION AND CERTIFICATION

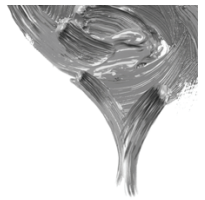
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All staff at the Annenberg Center for Health Sciences at Eisenhower have nothing to disclose.

All staff at CogniMed Inc. have nothing to disclose.

Michael B. Chancellor, MD, receives research support from Allergan, Inc.; Cook Group Incorporated; Medtronic, Inc.; and Pfizer Inc, and is a significant shareholder in Lipella Inc. He is a consultant for Allergan, Inc.; Astellas Pharma US, Inc.; Cook Group Incorporated; Lipella Inc; Ono Pharmaceutical Co., Ltd.; and Pfizer Inc.

Victor W. Nitti, MD, receives research support from Allergan, Inc., and Astellas Pharma US, Inc. He is a consultant for Allergan, Inc.; American Medical Systems; Astellas Pharma US, Inc.; Coloplast; Ethicon, Inc.; Medtronic, Inc.; Pfizer Inc; Serenity Pharmaceuticals, Inc.; and Uroplasty, Inc.

Jonathan H. Watanabe, PharmD, has nothing to disclose.

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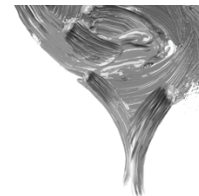
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MICHAEL B. CHANCELLOR, MD

Michael B. Chancellor, MD, is Director of the Neurourology Program at Beaumont Hospital, Royal Oak, and Professor of Urology at Oakland University William Beaumont School of Medicine, in Royal Oak, Michigan.

Dr Chancellor received a medical degree from Medical College of Wisconsin, in Milwaukee. After an internship in surgery and a residency in urology at the University of Michigan, in Ann Arbor, he completed a fellowship in neurourology at the College of Physicians and Surgeons of Columbia University, in New York, New York.

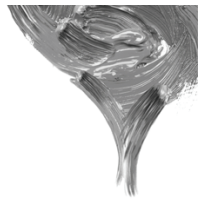
Because of his world-renowned expertise in the areas of stem cell and tissue engineering and drug discovery, Dr Chancellor is frequently invited to lecture at US and international meetings, often as the keynote speaker. He was the first urologist to use botulinum toxin to treat lower urinary tract dysfunction. He founded Lipella Inc and Cook MyoSite, which is in a multicenter North American trial of adult autologous muscle-derived stem cells to treat stress urinary incontinence. He has been funded for more than 10 years by the National Institutes of Health.

Dr Chancellor has contributed hundreds of journal articles to the peer-reviewed literature—most recently, *Pharmaceutical Research*, *Urology*, and *Journal of Urology*—and book chapters, including in the forthcoming editions of *Campbell's Urology* and the *Textbook of Female Urology and Urogynecology*. He serves on the editorial boards of a dozen journals and as a reviewer on many others.

He holds memberships in the Sexual Medicine Society of North America, the Association of Reproductive Health Professionals, and the International Society of Sexual Medicine. He was awarded the New Research Directions in Urinary Incontinence Symposium Best Basic Research Grant Prize from the National Institute of Diabetes and Digestive and Kidney Diseases in 2009 and, among many other honors, has also earned the Urodynamics Society Paul Zimkin Award, the grand prize of the International Jack Lapidus Essay Contest, and the Pfizer-American Urological Association Visiting Professorship Award.

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VICTOR W. NITTI, MD

Victor W. Nitti, MD, is Professor and Vice Chairman of the Department of Urology at New York University Langone Medical Center, in New York. He is also the head of Female Pelvic Medicine and Reconstructive Surgery at New York University School of Medicine and Fellowship Director for that program.

Dr Nitti is a graduate of the University of Medicine and Dentistry of New Jersey, in Newark, and did his urology residency at the State University of New York Health Science Center at Brooklyn (SUNY Downstate). He then completed a fellowship in female urology, neurourology, and reconstructive urology at the University of California, Los Angeles.

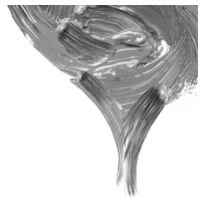
Dr Nitti is an authority in urodynamic techniques, medical and surgical therapies for incontinence, pelvic organ prolapse, and voiding dysfunction. He has presented his research at national and international meetings and has been invited as a visiting professor and participated in postgraduate courses throughout the world. Dr Nitti has been involved in numerous clinical trials for new pharmacologic, minimally invasive treatments for urinary incontinence. His current research focuses on new and innovative treatments for urinary incontinence and voiding dysfunction, diagnosis of voiding dysfunction, and outcome measures.

Dr Nitti has authored numerous peer-reviewed articles and book chapters in his areas of expertise and edited the textbook *Practical Urodynamics*. He serves on the editorial boards of *Neurourology and Urodynamics*, *Journal of Female Pelvic Medicine and Reconstructive Surgery*, *International Urogynecology Journal*, and *Reviews in Urology*.

Dr Nitti is a Fellow of the American College of Surgeons and the American Board of Urology and a member of the American Urological Association, the Society for Urodynamics and Female Urology, the International Continence Society, and the First, Second, Third, and Fourth International Consultations on Incontinence. He serves as President of the Society for Urodynamics and Female Urology (SUFU).

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JONATHAN H. WATANABE, PHARM.D

Jonathan H. Watanabe, PharmD, is a practicing long-term care provider and outcomes researcher at the University of Washington Pharmaceutical Outcomes Research and Policy Program (PORPP), in Seattle.

Dr Watanabe earned a pharmacy doctorate from the University of Southern California, in Los Angeles, and completed a master's degree in health economics with PORPP as part of a 2-year fellowship.

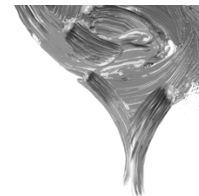
Dr Watanabe's main areas of interest are cost and epidemiologic analyses of off-label drug therapy, pharmacoepidemiology of antimuscarinic use, and validation of utility assessments across studies. His master's thesis, "Cost Analyses for Antimuscarinic Refractory Patients With Overactive Bladder," was presented as a podium session at the American Urological Association Annual Meeting in the first year of his fellowship.

Dr Watanabe has given numerous presentations on the costs and outcomes related to overactive bladder (OAB) treatment and the challenges related to drug therapy for OAB. During his fellowship, he has also lectured pharmacy and regulatory affairs students on patient-reported outcomes, pharmacoeconomics, and healthcare delivery. He serves as a reviewer for *Journal of Managed Care Pharmacy*.

He is an active member of the International Society for Pharmacoeconomics and Outcomes Research.

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Overactive bladder (OAB) is among the 10 most common chronic medical conditions, affecting approximately 33 million adults (16.5%) in the United States.^{1,2} Many individuals with OAB do not seek medical care, and estimates vary considerably among studies from 3% to 43%.³ OAB has been defined by the International Continence Society as urgency (with or without urge incontinence), usually with frequency and nocturia, in the absence of other pathologic or metabolic conditions that might explain the symptoms.⁴

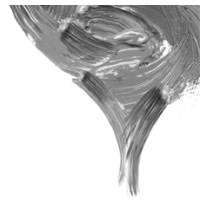
The causes of OAB are identified as either idiopathic, in which the cause is unknown, or secondary to an underlying neurologic disorder, referred to as neurogenic.⁴ Damage to part of the nervous system may cause loss of normal bladder function wherein the bladder is overactive (too-frequent contractions that cannot be inhibited or inability to coordinate bladder contractions with sphincter relaxation) or underactive (inability to contract and empty completely, ie, urinary retention). Disorders that may lead to neurogenic OAB include brain lesions (eg, stroke, brain tumor, or Parkinson disease) and spinal cord diseases (eg, multiple sclerosis or spina bifida). In these cases, affected individuals show signs of detrusor hyperreflexia or overactivity. Conversely, injuries to the sacral cord and peripheral nerves may prevent the bladder from emptying. Diabetes and acquired immunodeficiency syndrome are examples of conditions that cause peripheral neuropathy resulting in urinary retention. These diseases destroy the nerves to the bladder and may lead to silent, painless distention of the bladder.

Recommended treatment options for OAB include both nonpharmacologic and pharmacologic therapies.^{5,6} Nonpharmacologic treatment options comprise nutritional and fluid modifications, behavioral therapy, and pelvic floor muscle rehabilitation.⁷ A wide range of oral medications are indicated and have been used for the management of OAB, from smooth muscle relaxants to tricyclic antidepressants.⁶ Antimuscarinic agents are considered the mainstay of treatment and the first-line pharmacologic therapy to control OAB symptoms.⁵ Differentiating properties of the antimuscarinic agents are attributed to structural and molecular dissimilarities that cause distinctions in metabolism, absorption, potency, and selectivity.⁸

Despite improvements in receptor specificity over the last decade, fewer than 30% of patients adhere to antimuscarinic therapy for OAB.⁹ One study showed that fewer than 14% of patients who initiated OAB medications continued with therapy for 1 year, with a median of 31 days until

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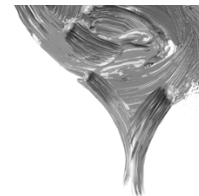
discontinuation; the authors postulated that adverse effects and perceived lack of benefit were potential variables.¹⁰ Perhaps because antimuscarinic medications cannot be used long-term in many cases and are often associated with systemic adverse effects (eg, dry mouth, blurred vision, constipation, and central nervous system adverse effects), the use of localized therapy (eg, sacral neuromodulation [SNM], intradetrusor onabotulinumtoxinA, and augmentation cystoplasty [AC]) has been explored for refractory OAB and is of particular interest.^{8,11-13}

Understanding the efficacy, safety, and cost of each therapeutic modality is extremely important in allowing clinicians to make informed, appropriate decisions about the optimal treatment option to meet their patients' needs.^{5,13} In an era of spiraling healthcare costs, clinicians and decision makers must consider data on outcomes and risks with cost estimates, all critical variables in evaluating antimuscarinic treatment failure options.¹³ Clinicians need to be aware that factors such as psychological well-being and emotional and sexual health outcomes influence patient perceptions of the value of treatment, perceived treatment efficacy, and treatment expectations.¹⁴ Patient perceptions affect adherence to and persistence with therapy, thereby predicting treatment outcomes. Patient satisfaction with treatment is directly related to positive expectations; therefore, patient expectations should be realistic and agreed to by patient and physician. A strong sense of patient-specific needs ensures that treatment decisions are optimized in the management of OAB.

In patients refractory to systemic oral medication, the decision to initiate treatment for OAB with localized therapy (SNM, botulinum toxin, or AC) is of critical importance and will be discussed in an array of interactive patient case studies.

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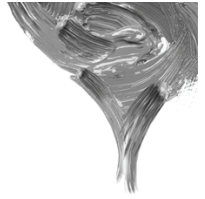


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SUGGESTED READING

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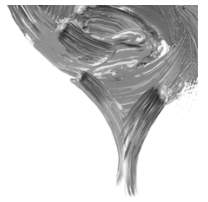
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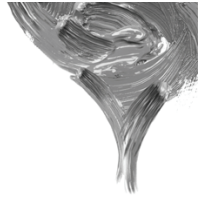
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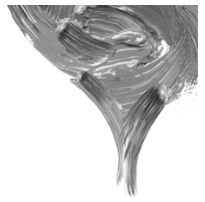
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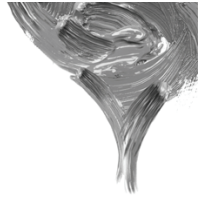
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Case Studies of Localized Treatment Modalities



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