Body System: Nephrologic

Session Topic: Urinary Retention

Educational Format		Faculty Expertise Required
REQUIRED	Interactive Lecture	Expertise in the field of study. Experience teaching in the field of study is desired. Preferred experience with audience response systems (ARS). Utilizing polling questions and engaging the learners in Q&A during the final 15 minutes of the session are required.
OPTIONAL	Problem-Based Learning (PBL)	Expertise teaching highly interactive, small group learning environments. Case-based, with experience developing and teaching case scenarios for simulation labs preferred. Other workshop-oriented designs may be accommodated. A typical PBL room is set for 50-100 participants, with 7-8 each per round table. Please describe your interest and plan for teaching a PBL on your proposal form.

Professional Practice Gap	Learning Objective(s) that will close the gap and meet the need	Outcome Being Measured
• There is no consensus regarding the relative benefits and harms of the various options used to treat CUR. • Current treatment guidelines do not directly address CUR. • There exists statistically significant and meaningful gaps in the medical skill necessary to provide optimal management of patients with UR, benign Prostatic Hyperplasia (BPH), prostatitis, and nephrologic imaging studies (including bladder ultrasonography). • There are often discrepancies between urologists and primary care physicians regarding appropriate and effective treatment options.	1. Perform a thorough history, physical examination, and order appropriate diagnostic testing to help classify the initial cause of urinary retention. 2. Counsel patients regarding safe and efficacious catheter management. 3. Establish appropriate management of urinary retention, as indicated by etiology. 4. Coordinate surgical referral as appropriate.	Learners will submit written commitment to change statements on the session evaluation, indicating how they plan to implement presented practice recommendations .

ACGME Core Competencies Addressed (select all that apply)

X	Medical Knowledge		Patient Care
	Interpersonal and Communication Skills		Practice-Based Learning and Improvement

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	Professionalism	X	Systems-Based Practice

Faculty Instructional Goals

Faculty play a vital role in assisting the AAFP to achieve its mission by providing high-quality, innovative education for physicians, residents and medical students that will encompass the art, science, evidence and socio-economics of family medicine and to support the pursuit of lifelong learning. By achieving the instructional goals provided, faculty will facilitate the application of new knowledge and skills gained by learners to practice, so that they may optimize care provided to their patients.

- Provide up to 3 evidence-based recommended practice changes that can be immediately implemented, at the conclusion of the session; including SORT taxonomy & reference citations
- Facilitate learner engagement during the session
- Address related practice barriers to foster optimal patient management
- Provide recommended journal resources and tools, during the session, from the American Family Physician (AFP), Family Practice Management (FPM), and Familydoctor.org patient resources; those listed in the References section below are a good place to start
    - Visit http://www.aafp.org/journals for additional resources
    - Visit http://familydoctor.org for patient education and resources
- Provide recommendations for performing a thorough history, physical examination, and order appropriate diagnostic testing to help classify the initial cause of urinary retention.
- Provide strategies and resources to counsel patients regarding safe and efficacious catheter management.
- Provide recommendations for establishing appropriate management of urinary retention, as indicated by etiology.
- Provide strategies and resources for coordinating surgical referral as appropriate.
- Provide recommendations for mitigating discrepancies in treatment recommendations, as necessary as other specialist are involved in the care of patients with UR.
- Provide an overview of current and new treatment options, including evidence-based recommendations regarding efficacy, cost, and patient treatment goals.

Needs Assessment

*Note – As acute urinary retention most often secondary to BPH; the management of BPH specifically, is addressed by the BPH topic session.

Urinary retention (UR) in men becomes more common with age, impacting 4.5 to 6.8 per 1,000 in men 40 to 83 years old; 100 per 1,000 in men in their 70's; and 300 per 1,000 for men in their 80's.[1,2] There exists some evidence that the observed incidence of BPH-associated acute UR has increased substantially in the United States between 2007 and 2010.[3] The incidence rate of UR in women has not been well studied, although some studies suggest that it is less common, though not rare.[1] The incidence and prevalence of chronic urinary retention (CUR) is unknown, although it is well understood that this condition affects elderly men more than any other population.[4]

Causes of both acute and chronic UR are numerous, and definitive management, depending on the etiology, may include surgery, bladder drainage, urethral dilation, urethral stents, or prostate medications. While the differential diagnosis of urinary retention is extensive, a thorough

history, careful physical examination, and selected diagnostic testing should enable the family physician to make an accurate diagnosis and begin initial management.[2]

Data from a recent American Academy of Family Physicians (AAFP) CME Needs Assessment survey indicate that family physicians have statistically significant and meaningful gaps in the medical skill necessary to provide optimal management of patients with UR, benign Prostatic Hyperplasia (BPH), prostatitis, and nephrologic imaging studies (including bladder ultrasonography).[5,6] In terms of CUR, there exist many treatments are available for CUR, including catheterization, surgery, minimally invasive procedures, and pharmacological treatments; however, current treatment guidelines do not directly address CUR.[4] Many commonly used medications including antihistamines, tricyclic antidepressants, and anticholinergics can cause urinary retention.[2,7,8] Physicians need continuing medical education that can help them to minimize the side effect of urinary retention and best deal with it when it occurs.

Physicians may improve their care of patients with UR by engaging in continuing medical education that provides practical integration of current evidence-based guidelines and recommendations into their standards of care, including, but not limited to the following:[2]

- In men with benign prostatic hyperplasia, initiation of treatment with alpha blockers at the time of catheter insertion improves the success rate of trial of voiding without catheter.
- Men with urinary retention from benign prostatic hyperplasia should undergo at least one trial of voiding without catheter before surgical intervention is considered.
- Prevention of acute urinary retention in men with benign prostatic hyperplasia may be achieved by long-term treatment with 5-alpha reductase inhibitors.
- Silver alloy-impregnated urethral catheters reduce the incidence of urinary tract infections in hospitalized patients requiring catheterization for up to 14 days.
- Suprapubic catheters improve patient comfort and decrease bacteriuria and recatheterization in patients requiring catheterization for up to 14 days.
- Low-friction, hydrophilic-coated catheters increased patient satisfaction and decreased urinary tract infection and hematuria in patients with neurogenic bladder who practice clean, intermittent self-catheterization.

Physicians can improve patient satisfaction with the referral process by using readily available strategies and tools such as, improving internal office communication, engaging patients in scheduling, facilitating the appointment, tracking referral results, analyzing data for improvement opportunities, and gathering patient feedback.[9,10]

These recommendations are provided only as assistance for physicians making clinical decisions regarding the care of their patients. As such, they cannot substitute for the individual judgment brought to each clinical situation by the patient's family physician. As with all clinical reference resources, they reflect the best understanding of the science of medicine at the time of publication, but they should be used with the clear understanding that continued research may result in new knowledge and recommendations. These recommendations are only one element in the complex process of improving the health of America. To be effective, the recommendations

must be implemented. As such, physicians require continuing medical education to assist them with making decisions about specific clinical considerations.

Resources: Evidence-Based Practice Recommendations/Guidelines/Performance Measures

- Urinary retention in adults: diagnosis and initial management[2]
- A practical guide to the evaluation and treatment of male lower urinary tract symptoms in the primary care setting[11]
- Common Questions About the Diagnosis and Management of Benign Prostatic Hyperplasia[12]
- Urinary Catheter Management[13]
- Adding health education specialists to your practice[14]
- Envisioning new roles for medical assistants: strategies from patient-centered medical homes[15]
- The benefits of using care coordinators in primary care: a case study[16]
- Engaging Patients in Collaborative Care Plans[17]
- The Use of Symptom Diaries in Outpatient Care[18]
- Health Coaching: Teaching Patients to Fish[19]
- Medication adherence: we didn't ask and they didn't tell[20]
- Encouraging patients to change unhealthy behaviors with motivational interviewing[21]
- Integrating a behavioral health specialist into your practice[22]
- Simple tools to increase patient satisfaction with the referral process[9]
- Benign Prostatic Hyperplasia | Overview (patient education)[23]

References

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2. Selius BA, Subedi R. Urinary retention in adults: diagnosis and initial management. *American family physician.* Mar 1 2008;77(5):643-650.

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4. Agency for Healthcare Reseach and Quality (AHRQ). Chronic Urinary Retention (CUR) Treatment. *Research Protocol* 2013; http://effectivehealthcare.ahrq.gov/index.cfm/search-for-guides-reviews-and-reports/?productid=1539&pageaction=displayproduct. Accessed June, 2015.

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