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Prostate Cancer Screening  
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During the prostate-specific antigen-based prostate cancer (PCa) screening era there has been a 53% decrease in the US PCa mortality rate. Concerns about overdiagnosis and overtreatment combined with misinterpretation of clinical trial data led to a recommendation against PCa screening, resulting in a subsequent reversion to more high-risk disease at diagnosis. Re-evaluation of trial data and increasing acceptance of active surveillance led to a new draft recommendation for shared decision making for men aged 55 to 69 years old. Further consideration is needed for more intensive screening in men with high-risk factors. PCa screening significantly reduces PCa morbidity and mortality.

Prostate Cancer: A Contemporary Approach to Treatment and Outcomes  
Adam B. Weiner and Shilajit D. Kundu  

Given the high incidence of prostate cancer and the need for shared decision making before screening, it is imperative that primary care providers understand treatment options and treatment adverse effects. In this article, the treatment options for the localized and metastatic prostate cancer are discussed, including the different modalities and their indications, adverse effects, oncologic outcomes, posttreatment monitoring, and potential treatment options following cancer recurrence.

Kidney, Ureteral, and Bladder Cancer: A Primer for the Internist  
Hans C. Arora, Michele Fascelli, JJ.H. Zhang, Sudhir Isharwal, and Steven C. Campbell  

Malignancies of the urinary tract (kidney, ureter, and bladder) are distinct clinical entities. Hematuria is a unifying common presenting symptom for these malignancies. Surgical management of localized disease continues to be the mainstay of treatment, and early detection is important in the prognosis of disease. Patients often require life-long follow-up and assessment for recurrence.

Testicular Cancer: Epidemiology, Diagnosis, and Management  
Zachary L. Smith, Ryan P. Werntz, and Scott E. Eggener  

There were an estimated 8720 new cases of testicular cancer (TC) in the United States in 2016. The cause of the disease is complex, with several
environmental and genetic risk factors. Although the disease is rare, the incidence has been steadily increasing. Fortunately, substantial advances in treatment have occurred over the last few decades, making TC one of the most curable malignancies. However, because TC typically occurs in younger men, considerations of the treatment impact on fertility, quality of life, and long-term toxicity are paramount; an individualized approach must be taken with patients based on their clinical and pathologic findings.

Urinary Stone Disease: Diagnosis, Medical Therapy, and Surgical Management 265
Wesley W. Ludwig and Brian R. Matlaga

Clinical suspicion of urolithiasis should be evaluated with low-dose computed tomography as the first-line imaging modality for nonpregnant, adult patients. A period of observation may be appropriate for ureteral stones less than 10 mm, and medical expulsive therapy may be beneficial for facilitating passage of distal ureteral stones. Regardless of stone type, patients should adhere to a low-sodium diet and attempt to achieve a urine volume of more than 2.5 L daily. Individuals with calcium stones should maintain a normal calcium diet, and if stones persist, citrate therapy or thiazide diuretics in the setting of hypercalciuria may be indicated.

Cutaneous Lesions of the External Genitalia 279
Emily Yura and Sarah Flury

Individuals with cutaneous diseases of the external genitalia often initially present to their primary care provider. When present, these conditions may be associated with considerable physical symptoms and psychological distress. Dermatoses affecting the genitals may be of infectious, inflammatory, or neoplastic cause and can be processes confined to the genitalia or a manifestation of a more widespread dermatologic condition. This article provides a guide to recognizing and managing common genital dermatoses and when to refer for specialist opinion.

Lower Urinary Tract Symptoms, Benign Prostatic Hyperplasia, and Urinary Retention 301
Omar Al Hussein Alawamlh, Ramy Goueli, and Richard K. Lee

Lower urinary tract symptoms (LUTS) consist of a common set of urologic symptoms that can affect the elderly. The prevalence of LUTS is expected to increase owing to the continued increase of numbers of the elderly. Although benign prostatic hyperplasia is considered a common cause of LUTS, the broader potential causes of LUTS are myriad. A wide range of diagnostic modalities and treatments are available to manage patients with LUTS, and their utilization should not be limited to the urologist.

Female Voiding Dysfunction and Urinary Incontinence 313
Amanda Vo and Stephanie J. Kielb

Female voiding dysfunction and incontinence are common in the general population, and symptoms have been shown to have a significant negative impact on health-related quality of life. This article highlights the epidemiology, evaluation, diagnosis, pharmacologic therapies, and surgical treatment for overactive bladder, stress urinary incontinence, and urogenital fistulas.
Penile and Urethral Reconstructive Surgery 325
Jonathan E. Kiechle, Nathan Chertack, and Christopher M. Gonzalez

Penile and urethral reconstructive surgical procedures are used to treat a variety of urologic diagnoses. Urethral stricture disease can lead to progressive lower urinary tract symptoms and may require multiple surgical procedures to improve patient’s symptoms. Male stress urinary incontinence is associated with intrinsic sphincter deficiency oftentimes associated with radical prostatectomy. Men with urethral stricture disease and stress urinary incontinence should be referred to a urologist because multiple treatment options exist to improve their quality of life.

Male Infertility Diagnosis and Treatment in the Era of In Vitro Fertilization and Intracytoplasmic Sperm Injection 337
Michael M. Pan, Mark S. Hockenberry, Edgar W. Kirby, and Larry I. Lipshultz

As assisted reproductive technologies use increases, the evaluation of male factor infertility has often become overlooked. However, male evaluation remains critically important, with benefits seen in overall health, as well as in natural and assisted pregnancy and birth rates. A comprehensive assessment of the male partner should be offered to all couples seeking infertility care.

Sexual Dysfunction: Behavioral, Medical, and Surgical Treatment 349
Nelson Bennett Jr

Sexual dysfunction affects both men and women and is responsible for 1 in 5 visits to urologists and/or gynecologists. It is important that treating providers use a logical and methodical approach to the diagnosis and treatment of this disorder. Behavioral therapy, coupled with oral medications, is very successful in treating erectile dysfunction. Complex and invasive therapies are used for more severe cases of sexual dysfunction and are best deployed by specialists.

Hypogonadism: Therapeutic Risks, Benefits, and Outcomes 361
John T. Sigalos, Alexander W. Pastuszak, and Mohit Khera

Hypogonadism is a common condition defined by the presence of low serum testosterone levels and hypogonadal symptoms and most commonly treated using testosterone therapy (TTh). The accuracy of diagnosis and appropriateness of treatment, along with proper follow-up, are increasingly important given the large increase in testosterone prescriptions and the recent concern for cardiovascular (CV) risk associated with TTh. In March of 2015, the US Food and Drug Administration required that testosterone product labels disclose a potential CV risk, despite the evidence base for this association being weak and inconclusive. However, TTh may improve CV outcomes rather than increase risks.

Urologic Emergencies 373
Adarsh S. Manjunath and Matthias D. Hofer

Urologic emergencies can involve the kidneys, ureters, bladder, urethra, penis, scrotum, or testicles. History and physical examination are essential
to diagnosis, whereas imaging is increasingly used to confirm diagnoses. Acute urinary retention should be relieved with Foley placement. Penile emergencies include paraphimosis, which can be treated by foreskin reduction, whereas penile fracture and priapism require urologic intervention. Fournier gangrene and testicular torsion are scrotal emergencies requiring emergent surgery. Nephrolithiasis, although painful, is not an emergency unless there is concern for concomitant urinary tract infection, both ureters are obstructed by stones, or there is an obstructing stone in a solitary kidney.

The Current State of Telemedicine in Urology

Adam Miller, Eugene Rhee, Matthew Gettman, and Aaron Spitz

Telemedicine use in urology is an evolving practice. In this article, the authors review the early experience of telemedicine specifically as it relates to urologic practice and discuss the future implications and the utility of telemedicine as it applies to other fields.

The Intersection of Medicine and Urology: An Emerging Paradigm of Sexual Function, Cardiometabolic Risk, Bone Health, and Men’s Health Centers

Martin M. Miner, Joel Heidelbaugh, Mark Paulos, Allen D. Seftel, Jason Jameson, and Steven A. Kaplan

Men’s mental health and how they think about their health are critical to the future of men’s health. Poor health choice patterns are established under age 50 years, when men are twice more likely to die than women. As the future of medicine focuses on quality and value, a better understanding of the social determinants of men’s health will identify areas for improvement. The presentation of a man with a sexual health complaint to a clinician’s office presents an opportunity for more complete evaluation. The future of men’s health will be well served by integrated men’s health centers that focus on the entire man.