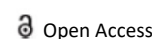




OPINION ARTICLE



Note on Subspecialties and Specialities in Urology

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Description

Urology, commonly known as genitourinary surgery, is a branch of medicine that focuses on the surgical and medical illnesses of the male and female urinary tract systems, as well as the male reproductive organs. The kidneys, adrenal glands, ureters, urine bladder, urethra, and male reproductive systems all fall under the urology umbrella (testes, epididymis, vas deferens, seminal vesicles, prostate, and penis).

The urinary and reproductive tracts are intertwined, and problems with one can lead to problems with the other. As a result, genitourinary disorders encompass a wide range of ailments that are treated in urology. Urology includes medical (non-surgical) diseases like urinary tract infections and benign prostatic hyperplasia with surgical conditions like bladder or prostate cancer, kidney stones, congenital anomalies, traumatic damage, and stress incontinence. Minimally invasive robotic and laparoscopic surgery, laser-assisted operations, and other scope-guided treatments are all examples of urological techniques. Urologists are trained in open and minimally invasive surgical techniques, including the use of real-time ultrasound guidance, fiber-optic endoscopic equipment, and a variety of lasers to treat a variety of benign and malignant disorders. Urology is linked to cancer, nephrology, gynaecology, andrology, paediatric surgery, colorectal surgery, gastroenterology, and endocrinology, and urologists frequently work with these specialists. Urology is one of the most competitive and sought-after surgical specialities for physicians, with new urologists accounting for less than 1% of medical school graduates in the United States each year.

Urologists are physicians who have specialised in the specialty of urology after finishing a general medical degree. Many urologists choose to pursue extra advanced training in a speciality area of specialisation during a fellowship that lasts 12 to 36 months after completing

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a residency programme. Urologic surgery, urologic oncology, and urologic oncological surgery, endourology, and endourologic surgery, urogynecology, and urogynecologic surgery, reconstructive urologic surgery (a type of reconstructive surgery), minimally invasive urologic surgery, paediatric urology, and paediatric urologic surgery (including adolescent urology, the treatment of premature or delayed puberty, and the treatment of congenital To prepare for academic as well as focused clinical employment, several urologists supplement their fellowships with a master's degree (2–3 years) or a Ph.D. (4–6 years) in relevant fields. Urology is a medical specialty that deals with the treatment of a variety of organs and physiological systems. It is divided into various subspecialties. Urologists often specialise in a particular sub-discipline at many larger academic centres and university hospitals that excel in patient care and clinical research.

Sub-disciplines in urology

Endourology: The field of urology known as endourology deals with the closed manipulation of the urinary tract. It has recently expanded to cover all minimally invasive urologic surgeries. Endourology, as opposed to open surgery, uses small cameras and tools put into the urinary tract. The cornerstone of endourology has always been transurethral surgery. The urethra allows access to the majority of the urinary tract, allowing for prostate surgery, urothelial tumour surgery, stone surgery, and uncomplicated urethral and urethral treatments. The inclusion of laparoscopy and robots to this section of urology has further split it.

Laparoscopy: Laparoscopy is a rapidly growing field of urology that has largely superseded open surgical techniques in some cases. The field of robotic-assisted surgery for the prostate, kidney, and ureter has been growing. In the United States, many prostatectomies are now performed with the help of so-called robotic assis-

tance. However, this has sparked debate because robotic surgery significantly increases the cost of surgery, and the benefit to the patient may or may not be equal to the additional expense. Furthermore, the current (2011) market scenario for robotic equipment is a de facto monopoly of one publicly traded business, adding to the cost-effectiveness debate.

Urologic oncology: Cancers of the prostate, adrenal glands, bladder, kidneys, ureters, testicles, and penis, as well as the skin, subcutaneous tissue, muscle, and fascia of those areas, are all treated surgically in urologic oncology (that particular subspecialty overlaps with dermatological oncology and related areas of oncology). Depending on the type of treatment, a urologist or an oncologist is in charge of genitourinary cancer treatment (surgical or medical). To treat urologic tumours that are amenable to surgery, most urologic oncologists in Western countries use minimally invasive procedures (laparoscopy or endourology, robotic-assisted surgery).

Neurourology: Neurourology is the branch of medicine that deals with the neurological system's control of the genitourinary system, as well as diseases that cause irregular urine. Strokes, multiple sclerosis, Parkinson's disease, and spinal cord damage can disturb the lower urinary tract, resulting in urine incontinence, detrusor overactivity, urinary retention, and detrusor sphincter dyssynergia, among other symptoms. In neurourology, urodynamic tests are crucial for diagnosis. Clean intermittent self-catheterization of the bladder, anticholinergic medications, injection of Botulinum toxin into the bladder wall, and advanced and less generally utilised therapies such as sacral neuromodulation are all used to treat nervous system diseases. Many researchers believe that abnormalities of the sensory nerve system have a function in disorders of painful or frequent urination; for example, abnormalities of the sensory nervous system are regarded to play a role in disorders of painful or frequent urine by many researchers (e.g. painful bladder syndrome also known as interstitial cystitis).