Surgical Procedures

Surgeons at the Brady Urological Institute are recognized for pioneering research behind a number of minimally invasive procedures. Following is a list of the minimally invasive procedures that we offer. More information, including detailed descriptions of the surgical procedures, video clips and instructions for patients can be found at our Web site: http://urology.jhu.edu/MIS

Prostate Cancer
- Nerve-sparing robotic radical prostatectomy: robotic-assisted surgery used to treat localized prostate cancer while preserving the cavernous nerves
- Nerve-sparing laparoscopic radical prostatectomy: removal of a cancerous prostate using conventional laparoscopic techniques

Kidney Cancer
- Laparoscopic radical nephrectomy: laparoscopic removal of the entire diseased or cancerous kidney
- Laparoscopic partial nephrectomy: laparoscopic removal of a small and localized kidney cancer while preserving the remaining healthy kidney
- Percutaneous renal tumor ablation: needle probe placed through the skin to ablate and destroy small kidney cancers

Benign Prostatic Hyperplasia
- Holmium laser prostatectomy: laser enucleation of prostatic adenoma for the treatment of men with symptomatic benign prostatic hyperplasia
- Green light laser prostatectomy: laser ablation of prostatic adenoma for the treatment of men with symptomatic benign prostatic hyperplasia
- Transurethral needle ablation of the prostate: needle ablation of prostatic adenoma for the treatment of men with symptomatic benign prostatic hyperplasia

Visit our Web site at http://urology.jhu.edu/MIS for a complete listing of our minimally invasive surgeons, patient information guides, procedural videos, and appointment scheduling.
Division of Minimally Invasive Urologic Surgery at Johns Hopkins

The James Buchanan Brady Urological Institute is the world’s leading center for research, discovery and innovation in urology. The Division of Minimally Invasive Urologic Surgery (MIUS) at the Brady is recognized as a center of excellence and attracts a large volume of patients with prostate, kidney, testis and adrenal malignancies and disorders, as well as kidney stone disease. Members of the division are committed to exploring minimally invasive surgical treatments as a means of reducing patient discomfort while achieving optimal outcomes and preserving quality of life. Many procedures that previously required open surgical intervention can now be performed laparoscopically or, in some cases such as with kidney tumors, with image-guided needle ablative thermal treatments.

A World-Class Team

Many of our surgeons in the MIUS division are fellowship trained in oncology, endoscopy, laparoscopy and robotic surgery. We incorporate the most cutting-edge, minimally invasive treatments, including robot-assisted prostatectomy using the daVinci Surgical System (Intuitive Surgical, Sunnyvale, CA), laparoscopic radical and partial nephrectomy as well as image-guided cryoablation of kidney tumors, and Holmium laser and extracorporeal shockwave treatment for kidney stones. We are also committed to training the future leaders in minimally invasive urology by offering a fellowship training program each year. Over 15 endourology fellows have graduated from the program, and many of them are now division leaders in minimally invasive urologic surgery at major academic institutions around the country.

Kidney Stones

- Extracorporeal shock wave lithotripsy: noninvasive technique in which sound waves are used to break a kidney stone into small pieces to allow for spontaneous passage
- Ureteroscopy: a procedure that uses a thin telescope which is passed through the urethra and into the ureter to treat stones within the kidney or ureter
- Percutaneous nephrolithotomy: the removal of large kidney stones by breaking and extracting them through a tiny incision made in the skin

Kidney Blockage and Cysts

- Laparoscopic pyeloplasty: laparoscopic reconstruction of the kidney’s drainage system in patients suffering from kidney blockage
- Laparoscopic renal cyst ablation: laparoscopic drainage and treatment of symptomatic kidney cysts

Adrenal Tumors

- Laparoscopic adrenalectomy: laparoscopic removal of metabolically active adrenal tumors

Kidney Donation

- Laparoscopic live-donor nephrectomy: laparoscopic alternative to open kidney donation

Testis cancer

- Laparoscopic retroperitoneal lymph node dissection, a technique for removing the retroperitoneal lymph nodes in patients with testicular cancer

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