

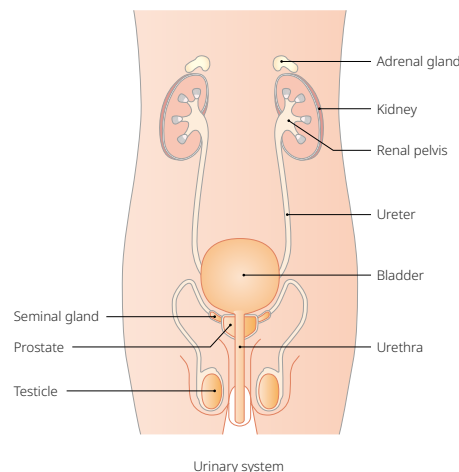
Urology

> Benign Prostate Hyperplasia (BPH)

A condition in which urination is obstructed by the enlarged prostate blocking the outflow of the bladder. Symptoms include a sensation of residual urine and more frequent trips to the toilet due to the reduced amount of urine passed at each urination.

> Urinary Stone

A condition in which substances contained in urine crystallize for some reason and coalesce in the form of a stone. Typical symptoms include extreme pain, bloody urine, or the presence of the stone in urine.



> Bladder Tumor (Bladder Cancer)

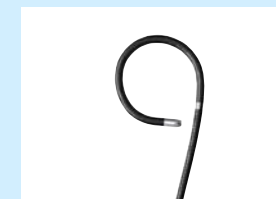
This occurs when the lining of the bladder (urothelium) develops a cancerous growth. While most cases (90% or more) are categorized as urothelial cancer, rare instances of squamous cell carcinoma and adenocarcinoma also occur. The main symptoms are bloody urine or pain during urination.

Ureteroscope/Cystoscope

They are used for viewing the urinary bladder through the urethra and the kidneys through the urinary duct. Olympus manufactures both videoscopes and fiberscopes for this application. The videoscope version supports high-definition imaging due to its high performance imager and is also capable of NBI. Moreover, in order to facilitate the observation of the bladder neck, both the Up and Down sides bending angle of 275 degrees are realized.



Reusable urology videoscope



Flexible bending function



Single-use urology videoscope

Note: A single-use urology videoscope is available in selected countries.

Resectoscope

A resectoscope is a rigid endoscope for diagnosing and treating the urethra and bladder. It is inserted in from the external urethral orifice and used for the surgical resection of a lesion with high-frequency current.



Resectoscope

Urology

Method of treatment for **BPH and bladder tumors (bladder cancer)**

Transurethral Resection (TUR)

TUR is a procedure in which a surgeon inserts a resectoscope from the urethra and then, using the handle, operates a loop-shaped electrode to surgically resect tissue from an enlarged prostate or a bladder tumor with an electro-surgical knife. For a safe procedure and precise resection, the solution from Olympus is the TUR is procedure, in which a resection is performed by discharging electricity from the entire area surrounding the electrode through saline.



Resection of the enlarged prostate when a resectoscope is inserted transurethraly near the neck of the urinary bladder

Main therapeutic device used

Electrosurgical Generator

The equipment enables incision of a lesion and coagulation by connecting to an endotherapy device and generating a high-frequency current.



Electrosurgical Generator

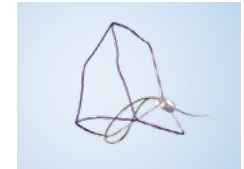


Resectoscope and special-use electrode

Method of treatment for **BPH**

Treatment through Non-Ablative Device

Olympus is rolling out iTind, a minimally invasive treatment device that ensures urine flow by reshaping the bladder neck and prostatic urethra over the span of five to seven days after longitudinally implanting a three-wire nitinol device in the prostate. iTind enables a patient to be treated at a doctor's office or clinic, returning home the same day, and to achieve resolution of symptoms without a permanent implant left behind.



Minimally invasive treatment device for BPH

Method of treatment for **urinary stones**

Transurethral Lithotripsy (TUL)

During Lithotripsy, an urologist navigates an endoscope through the urinary tract and uses laser or ultrasonic energy to break up one or more stones in the bladder, ureter, or kidney. The resulting stone fragments may be expelled naturally or can be removed through a ureteral sheath or using stone retrieval baskets.

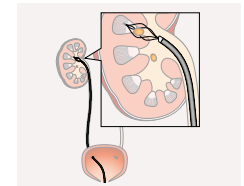


Image of removing stones with stone retrieval baskets

Main therapeutic device used

Thulium Fiber Laser System

This product uses superpulsed thulium fiber laser technology for the removal of stones in the urinary tract (the kidney, ureter, bladder, and urethra) and for resection of soft tissue. It works by breaking up the stone into tiny pieces which are then passed out of the body during urination. The device helps shorten operation time by improving performance for breaking the stones. The device is also used to treat soft tissue (such as the prostate), enabling Olympus to provide urologists with a variety of procedural solutions. The compact size of the equipment helps to save space and make movement easier between operating rooms.



Thulium fiber laser system