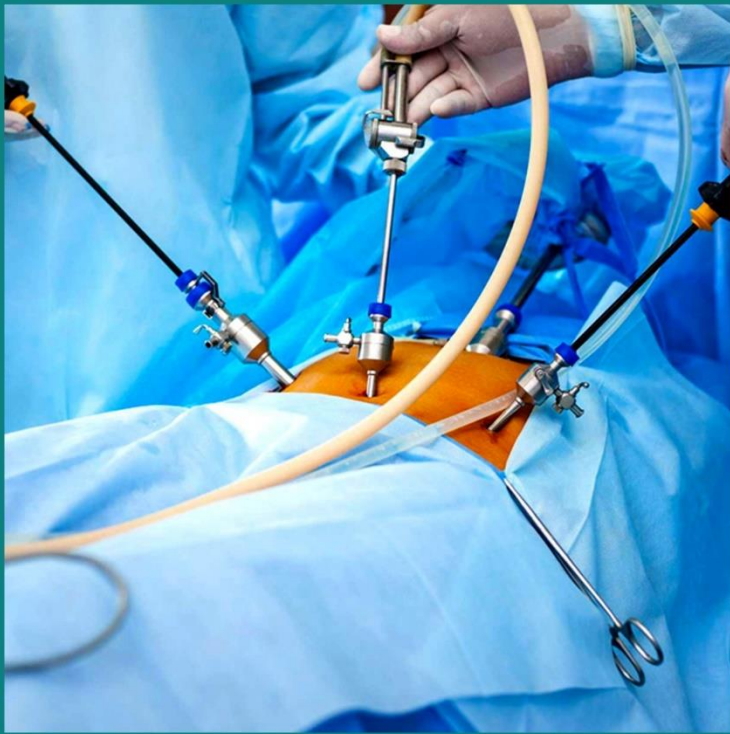


# Endoscopic Surgery Updates



## Endoscopic surgery for:

Kidney stones

Ureteropelvic junction  
obstruction

Ureteral & Urethral  
strictures

Tumors

Obstruction

**Er**♀<sup>♂</sup>med  
Urology & Reconstructive Clinic

## Endoscopic Surgery

Many diseases of the urinary tract require endoscopic surgery. These include kidney stones, ureteropelvic junction obstruction, ureteral strictures, tumors within the kidney collecting system, ureter, and to relieve blockage in the kidney due to various reasons.

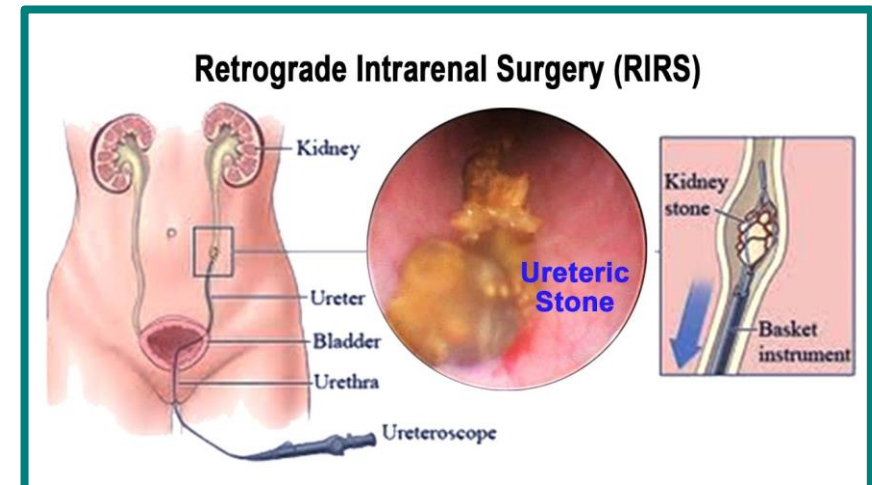
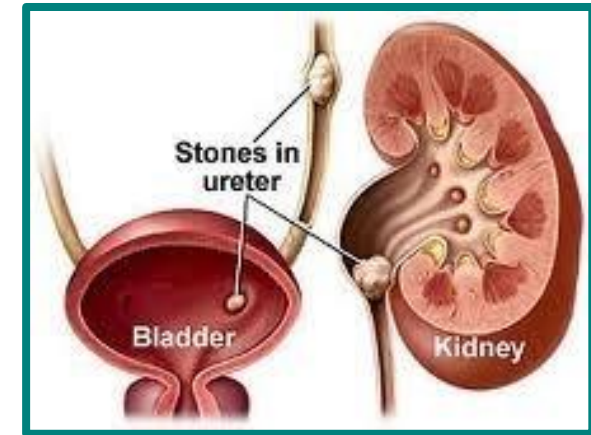


There are two **main approaches** to endoscopic surgery.

The first approach is from a “retrograde” fashion.

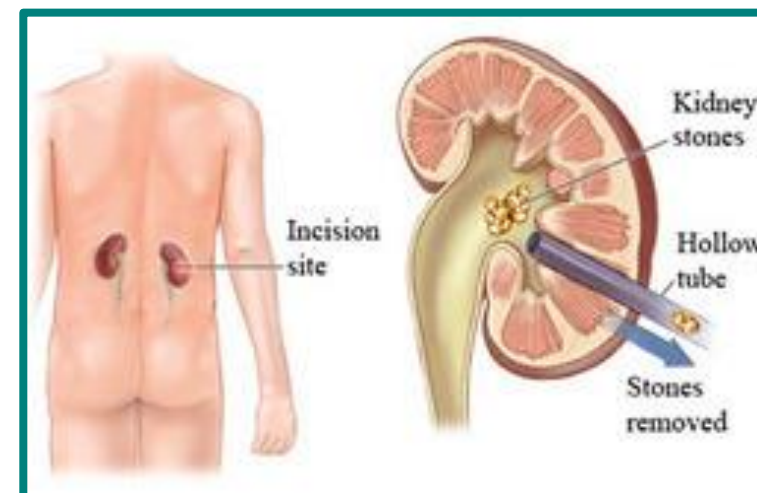
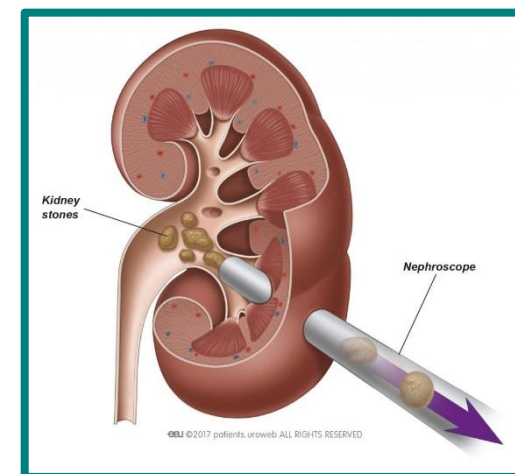
This means to approach from the lower part of the urinary tract up. The patient is placed to sleep. The legs are propped up in stirrups. Using a fiberoptic scope (ureteroscope) connected to a camera, the surgeon watches a television monitor as the scope is inserted into the bladder, then advanced into one of the ureters. Often fluoroscopy, or real-time x-ray, is used to guide the course. Depending on the disease in the ureter, a plastic tube, called the stent, may be passed into the ureter to connect the kidney with the bladder. This is used to bypass any stones, strictures, or blockage of the ureter in order to drain urine. Often, the surgeon may use laser to break up stones or strictures.

Postoperative recovery depends on the disease process. Most of the time the patients are discharged home the same day if they do not have a fever, and are able to take liquids following surgery.



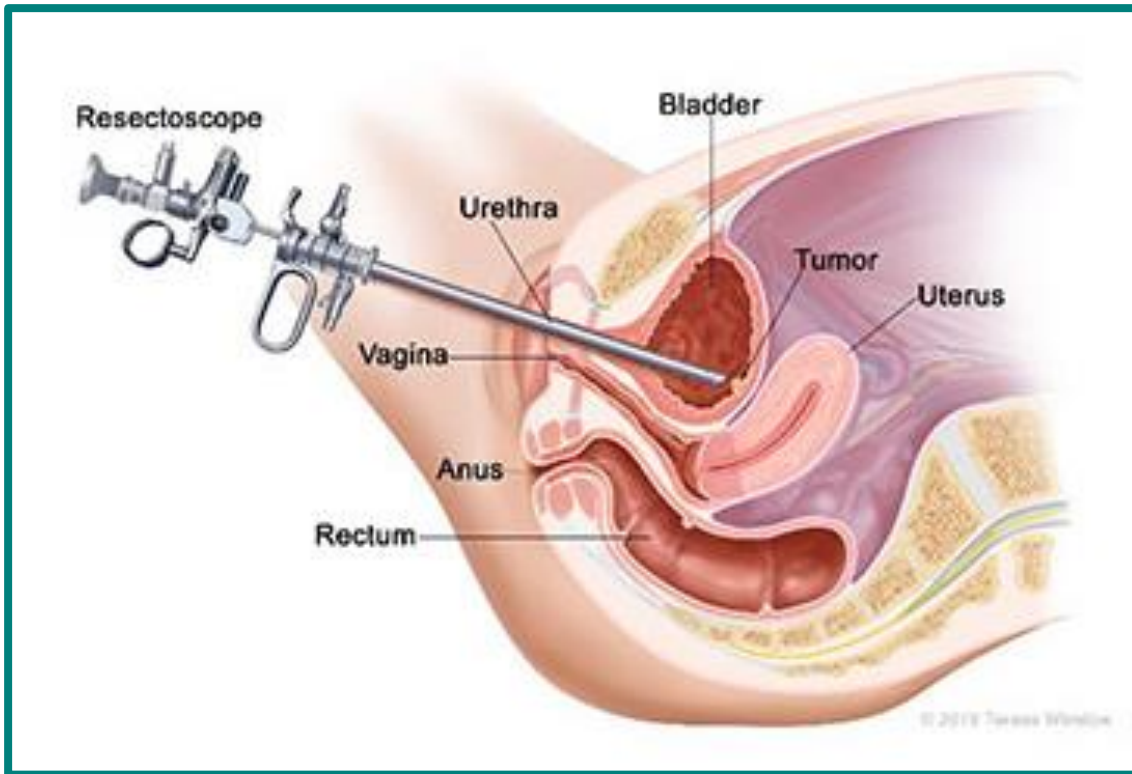
The second approach is from the “antegrade”, or “percutaneous” fashion.

This means to approach the kidney through the skin. Often the patient already has a tube (nephrostomy tube) inserted into the affected kidney by the interventional radiologist. The patient is then placed to sleep. He/she is turned onto his/her belly, exposing the back. The nephrostomy tube is inserted and tracked dilated. Using a fiberoptic scope, the surgeon sees the kidney. Kidney stones, ureteropelvic junction obstruction, and sometimes tumors or unknown tissues are treated through the tract in this fashion. Often the surgeon will leave a tube in the kidney to drain the urine, and any clots or stones. Within the next few days, dye is injected into the tube, and an x-ray is taken. If the kidney is draining well, the tube may be removed, and the patient is discharged home.





Other endoscopic procedures include all kinds of minimal invasive approaches to the urinary system (flexible and rigid cystoscopy, ureteroscopy for stone disease, tumor and obstructive pathology).



**PS:**

The patient should expect to resume their normal activities within 1-2 weeks following ureteroscopic surgery, and 2-3 weeks following percutaneous surgery.



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