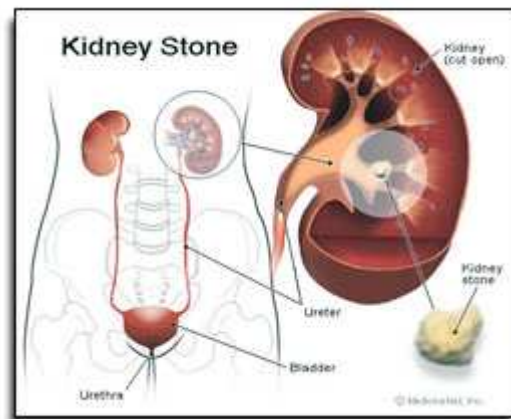


Kidney & Ureteral Stones

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"Kidney and ureteral stones can be very uncomfortable. Fortunately, we use a variety of medications and modern treatments to either remove stones or allow them to pass in the safest and most comfortable manner."

--Keith D. Bloom, M.D.



"The treatment of kidney stones has evolved into a minimally invasive technique that affords a safe treatment with a quick recovery. We employ the latest techniques to achieve these goals."

--Christopher W. Johnson, M.D.

Stones (i.e., lithiasis) are a common urological problem. There are several types of stones. The most common stone is calcium oxalate. Other stones consist of: Uric acid, cysteine, and struvite stones. It is common for patients to have a mixed composition stone. These stones typically form in the kidney and often pass down the ureter into the bladder. It is during this trip down the ureter that stones can cause 'colic' or pain in the flank that can radiate to the groin. These patients often have blood in the urine (i.e., hematuria) and may potentially develop urinary obstruction. If an obstructed patient develops a urinary tract infection (UTI) they may need to have an emergent procedure to relieve the blockage.

Patients with stones are evaluated with an X-ray, IVP, CT scan, or ultrasound. The size, type, and location of the stone dictate the choice of treatment. Uric acid stones can potentially dissolve with medication. All other stones require lithotripsy. Current treatment techniques are performed in a minimally invasive manner. ESWL (extracorporeal shock wave lithotripsy) utilizes shock waves created outside the body to fragment stones. If ESWL is not appropriate, then endoscopy (cystoscopy, ureteroscopy, or pyeloscopy) with laser or ultrasound lithotripsy can be utilized. Large stones in the kidney may need to be treated percutaneously. This technique requires the temporary placement of a tube through the back into the kidney through which lithotripsy is performed. Temporary ureteral stents may be employed in any of these procedures. Patients that have formed multiple stones may benefit from a metabolic evaluation to try to prevent future stone formation.