

URINARY TRACT STONES/ENDOUROLOGY
PGY2 AND PGY 3 OBJECTIVES

MEDICAL EXPERT

<i>Basic Science Knowledge</i>	<p>Be able to describe the epidemiological aspects of stone disease, including the intrinsic factors (genetics, age, sex) and extrinsic factors (diet, geography, occupation, etc) that influence the incidence and prevalence of stone disease.</p> <p>To understand and describe the pathophysiology of calcium, uric acid, cystine, and infection stone formation.</p> <p>Be able to describe the effects of ureteral obstruction on renal function (acute and chronic changes)</p> <p>Able to describe the pathogenesis of ureteral pelvic junction obstruction (UPJO).</p>
<i>Clinical Knowledge</i>	<p>Be able to describe and recognize the symptoms and signs of a patient presenting with an acute stone episode.</p> <p>Be able to describe and order the appropriate diagnostic tests to make the diagnosis of an acute stone episode.</p> <p>Be able to read and interpret the common radiologic tests used to diagnose urinary tract stones (KUB, IVP, CT scan, U/S, retrograde pyelography)</p> <p>Able to describe and order the appropriate tests used for the diagnosis of UPJO.</p> <p>Has an understanding and is able to describe the common guidewires, ureteral catheters, balloon dilators and stents used in the treatment of stone disease.</p> <p>Able to describe the indications for ureteral stents and their associated complications</p> <p>Be able to describe the various surgical/endourological treatment options for urinary tract stones depending on their location (shock wave lithotripsy, ureteroscopy, percutaneous nephrolithotripsy [PCNL])</p> <p>Have an understanding of the methods of shockwave generation used in shockwave lithotripsy (SWL).</p> <p>Able to outline the bioeffects and contraindications to SWL</p> <p>Able to describe the indications and options for intervention in the patient with UPJO.</p>
<i>Recognition and Management of Emergencies</i>	<p>Be able to describe the clinical scenarios that constitute an emergency in the patient with urinary tract stones (bilateral ureteral obstruction, solitary kidney, infected hydronephrosis)</p> <p>Be able to order the appropriate management for patients in these situations.</p>
<i>Technical and Procedural Skills</i>	<p>Be able to perform cystoscopy and retrograde pyelography for the diagnosis and treatment of ureteral and renal calculi</p> <p>Be able to perform cystoscopy and stent insertion and stent removal</p> <p>Be able to perform cystoscopy and insertion of ureteral access catheter or guidewire in preparation for percutaneous nephrolithotripsy or ureteroscopy</p> <p>Able to perform rigid ureteroscopy and intracorporeal lithotripsy for the treatment of distal ureteral stones.</p> <p>Able to perform rigid nephroscopy, intracorporeal lithotripsy, and stone extraction during PCNL</p>
<i>Specific Clinical Expectations</i>	<p>Expected to attend one ambulatory clinics with Dr. Wollin or Dr Schuler. The emphasis will be on the diagnosis, treatment and follow-up of patients with stone disease and endourologic disease.</p> <p>Expected to attend and participate in two full days of shockwave lithotripsy with Dr. Wollin, Dr. Bochinski, or Dr. Evans. At the completion of this rotation, the resident will be qualified to perform shockwave lithotripsy.</p> <p>Must spend a one-hour session with Dr. Wollin, Dr. Evans, or Dr. D. Bochinski on the Uromentor learning percutaneous renal access and ureteroscopy technical skills.</p>

URINARY TRACT STONES/ENDUROLOGY
PGY 4 AND PGY 5 OBJECTIVES

MEDICAL EXPERT

Basic Science Knowledge Be able to describe the epidemiological aspects of stone disease, including the intrinsic factors (genetics, age, sex) and extrinsic factors (diet, geography, occupation, etc) that influence the incidence and prevalence of stone disease.
To understand and describe the pathophysiology of calcium, uric acid, cystine, and infection stone formation.
Be able to describe the effects of ureteral obstruction on renal function (acute and chronic changes)
Able to describe the pathogenesis of ureteral pelvic junction obstruction (UPJO).

Clinical Knowledge Be able to describe and order the appropriate tests for the medical evaluation of the first time and recurrent stone former (bloodwork, 24hr urine collections)
Be able to interpret the results of test ordered in # i and ii.
Be able to describe and have an understanding of the dietary methods of stone prevention.
Be able to describe the indications for prescribing medications for the management of patients with stones.
Be able to discuss and outline the management of urinary tract stones occurring in pregnancy.
Able to describe the treatment principles and post-op care of the SWL patient.
Able to outline the complications of SWL and their treatment.
Able to outline the technical aspects and complications of ureteroscopy and percutaneous nephrolithotripsy (PCNL).
Able to outline and perform the immediate and long-term post-op care of the patient undergoing ureteroscopy or PCNL.

Recognition and Management of Emergencies Able to outline the steps in treating acute intra-op and post-op bleeding in the patient undergoing PCNL.

Technical and Procedural Skills Able to perform SWL for renal and ureteral stones
Able to perform flexible ureteroscopy and intracorporeal lithotripsy for the treatment of proximal ureteral and renal calculi.
Able to obtain percutaneous radiological access to the kidney for PCNL.
Able to dilate the percutaneous tract during PCNL and insert working sheath.
Able to perform flexible nephroscopy and intracorporeal lithotripsy during PCNL.
Able to perform retrograde and antegrade endopyelotomy for the treatment of UPJO.

Specific Clinical Expectations Expected to attend two ambulatory clinics with Dr. Wollin. The emphasis will be on the diagnosis, treatment and follow-up of patients with stone disease and endourologic disease.
