

Medical Student Clerkships

Medical students rotate on Urology service on a periodic basis. Generally, they include those MS3's who are on a component of their surgical rotation as well as medical students from other institutions who have an interest in the Urology program at UTHSCSA. There are generally 2-6 senior medical students (MS-4) who will rotate either on clinical or research rotations at UTHSCSA due to an interest in Urology. These rotations are generally during the months of July through October due to the early Urology match. The students are assigned equally to the VA, Pediatric & University Hospital and switch services weekly. **Residents have a primary teaching responsibility for these students during their rotations.** To help in the resident's development as a teacher, medical student goals & objectives are outlined below and should form the basis for instruction. The students should present their own patients during rounds and one short didactic presentation on a topic of relevance at pre-op conference during the rotation.

MS 3 and 4 Clerkship Goals & Objectives:

Goals:

Develop an understanding of the field and science of Urology.

Develop the skills necessary to conduct the Urologic history and physical examination.

Develop an understanding of common Urologic problems in the adult and children.

Develop skills for simple Urologic procedures.

Objectives:

At the conclusion of their rotations on Urology, the medical students should have accomplished the following:

1. GU Imaging
 - Understand what Urologic Sonography, CT Urogram and MR Urogram demonstrate and when they are indicated
 - Interpret a CTU and understand its limitations
 - Understand the limitations and safe use of urologic imaging (CT, US, MR)
 - Understand the safe use of intravenous contrast and imaging agents
2. Urinalysis
 - How to perform and interpret a urinalysis and urine microscopy
3. Hematuria
 - List common causes for hematuria
 - Know when it is appropriate to refer a patient for a hematuria evaluation
 - Be able to describe an adequate evaluation of hematuria
4. Pediatric/Adolescent Urology
 - Discuss the differential diagnosis, evaluation and treatment of a painful, swollen testicle
 - Be able to discuss the pros and cons of circumcision and when it is contraindicated
5. Oncology
 - Understand the risk factors for renal, urothelial, penile, and testicular malignancies

- Understand reasons for and evaluated PSA and in whom it is appropriately used for prostate cancer screening
- Be able to detect a prostate that is suspicious for malignancy on rectal examination
- Understand the typical management and follow-up of bladder tumors
- Understand the 4 management options for prostate cancer

6. Urinary Calculi

- Know the typical presentations of a kidney stone
- Understand the typical presentation of a uric acid stone
- Learn the 4 indication to admit patients with a renal stone
- Understand the physics of ESWL and follow a patient through this procedure

7. Impotence

- Demonstrate the ability to take a good sexual history
- Be able to discuss the options available to these patients and their partners
- Understand the indications and contraindication of Viagra®

8. Benign Prostate Enlargement

- Learn the irritative and obstructive voiding complaints
- Learn the medical and anatomic causes of urinary obstruction
- Learn the appropriate management of post-obstructive diuresis and when to suspect it
- List 3 medical and 3 surgical therapies for BPH
- Understand how to safely prescribe and the side effects of alpha-antagonists

9. Incontinence

- List 2 bladder specific and 2 urethral/sphincteric specific causes for incontinence
- Understand the following three mechanisms of incontinence (stress, urge, and overflow)
- Learn the medicines which may result in a neuropathic bladder
- List the 4 risk factors of stress urinary incontinence

10. Foley Catheter Placement

- Learn and demonstrate the proper technique of Foley catheter placement
- Describe what a coude catheter is and how it works
- Describe how to determine proper placement and when to suspect faulty placement of the catheter
- Learn to request to consultation of a Urologist

11. GU Trauma

- Learn when it is appropriate to consult a Urologist

- Learn the 3 basic signs of urethral trauma and when a urethrogram is required
- Learn the two basic types of bladder injuries and how they are typically managed

12. Urinary Tract Infections

- Describe the typical presentations of acute and chronic bacterial prostatitis, pyelonephritis, and urethritis
- Describe the minimal evaluation for a UTI in a child and a man

RECOMMENDED RESOURCES:

- Urology - Lecture Notes. Kaisary, Ballaro and Pigott , current edition
- Urology. Michael T. McFarlane: House Officer Series, current edition.
- Clinical Manual of Urology. Hanno and Wein: current edition.

Medical Student Conference Responsibilities:

All students are required to attend the scheduled Urology conferences including the resident conferences noted above and the medical student conference held weekly with the administrative chief resident. Students must be released from clinical responsibilities during these times. Additionally, each student will be required to do a short (10') presentation on a selected Urology topic during the rotation. Residents may assist in the selection and development of the presentation as needed.

Medical Student Inpatient Care Responsibilities:

As an active participant of the team, students have several important responsibilities. The efficient running of the service, and student development as a professional depend on acceptance of these responsibilities. Evaluations should be based upon punctuality, industriousness, compassion, dependability, and honesty. This is the time in their career to develop good work habits, which will determine the quality of care that their patients receive and their reputation as a physician. Irrespective of interest in Urology, students should be taught the basics of urology to allow them to function in a primary care environment. The demonstration of good personal qualities is actually more important than the demonstration of facts and specific skills in Urology. A knowledgeable doctor that is unreliable, lazy or insensitive is rarely valued.

Hospital ward:

- Every patient admitted to the hospital must be followed by a medical student. In general, students follow the patients in whom they assist in admitting or surgery.
- Students are expected to round on their patients before morning rounds to collect the patient's vital signs, record input and output, overnight events. The patient's chart, data entered on the computer, and patients' nurses are excellent resources.
- Students should present a concise summary of their patient and this data to the Chief Resident on morning rounds and the Attending on evening rounds.

- Students are expected to be knowledgeable of diagnostic information gathered on patients through their course and report this information on rounds.
- Students should have the first opportunity to place catheters and intravenous access for patients.

Operating room:

- A medical student is required to be scrubbed for most operative cases.
- Students should meet patients prior to surgery in the holding area and review their history.
- Students help the anesthesiologist transport the patient to the operating room,
- Students learn how to write post-operative orders for common procedures.
- Students help the anesthesiologist transport the patient to the recovery room.
- Students check on patients post-operatively and write a post-operative note in their chart.

Outpatient Clinics:

Here, students should be given the opportunity to learn how to evaluate the typical conditions seen in a urology office. When examining female patients, male students must have a chaperone. Female students are encouraged to request a chaperone when they feel the need. A rectal exam is usually required in every male patient. In order to properly screen patients for prostate cancer and BPH in the future, students must perfect skill in this simple but subtle examination.