



SURG 602 Urology

Elective Description

This elective provides students with an introduction to the multidisciplinary management of benign and malignant disease of the urogenital system.

Credit: 2-4 semester credits

Prerequisites: SURG 500

Elective Structure: The expectation for this required clerkship is that students develop a foundation of knowledge and skills built upon basic science knowledge needed in the area of General Surgery, regardless of the specialty chosen for post-graduate training. Emphasis will be placed on:

- Surgical patient management
- Performing the history and physical examination
- Understanding urological pathology and potential
- Devising a differential diagnosis for presenting complaints
- Application of appropriate diagnostic technology
- Extending wound care management knowledge
- Enhancing of surgical and suturing techniques
- Discriminating appropriate treatment modalities for urological diseases
- Recognizing urological emergencies
- Knowledge of basic urological procedures
- Knowledge of anatomy and basic sciences
- Knowledge of pathogenesis of urological pathology in understanding therapeutic options and protocols
- Knowledge of goals in conservative medical management of urological pathology
- Discerning when to operate and when not to operate in urological pathology
- Knowledge of urological complications and their management
- Demonstrate motivation to learn, show appropriate assertiveness, flexibility, adaptability toward education

Entrustable Professional Activities

As a fourth-year student, the focus of skills development are those tasks important for entering residency training:

- Gather a history and perform a physical exam
- Prioritize a differential diagnosis following a clinical encounter
- Recommend and interpret common diagnostic and screening tests
- Enter and discuss orders and prescriptions
- Document a clinical encounter in the patient record
- Provide an oral presentation of a clinical encounter
- Form clinical questions and retrieve evidence to advance patient care

- Give or receive a patient handover to transition care responsibility
- Collaborate as a member of an inter-professional team
- Recognize a patient requiring urgent or emergent care and initiate evaluation and management
- Obtain informed consent for tests and/or procedures
- Perform general procedures of a physician
- Identify systems failures and contribute to a culture of safety and improvement

General Course Objectives

Medical Knowledge

- Review the development of the renal and reproductive systems
- Review the surgical anatomy of the renal and reproductive systems
- Review the causes and distinguishing features of urolithiasis
- Review the TNM staging for renal cell carcinoma, transitional cell carcinoma of the bladder, and prostate cancer
- Describe the innervations of the detrusor smooth muscle, the bladder neck smooth muscle and the voluntary urethral sphincter.
- Describe the effects of anticholinergic, alpha-adrenergic antagonist medications on voiding function.
- Review the neurologic control of penile erection and detumescence including neurotransmitters released by intracavernosal nerve terminals
- Describe the mechanism of action of sildenafil including side effects and possible drug interactions
- Review the pathophysiology of germ cell testis tumors.

Patient Care

- Describe the typical voiding problems of a patient with:
 - Sacral spinal cord injury
 - Supra-sacral spinal cord injury
 - Parkinson disease
 - Stroke
 - Brain tumor
- Describe the 4 broad categories of urinary incontinence
- Describe the 2 broad categories of urinary retention in an adult male
- Describe typical symptoms of benign prostate hyperplasia (BPH)
- List 4 indications for surgical resection of the prostate in men with BPH
- Develop a differential diagnosis for an elevated PSA in a 60-year-old male
- Describe 2 mechanisms underlying stress urinary incontinence in women
- Describe 4 broad categories of erectile dysfunction
- Develop a differential diagnosis of a painless scrotal mass in an adult

Interpersonal and Communication Skills

- Work as a team member with other health professionals

RECOMMENDED TEXTBOOKS and Other Resource Material

Doherty GM. 2015. Current Diagnosis and Treatment: Surgery, 14th edition. Lange McGraw Hill.

Pestana C. 2018. Dr. Pestana's Surgery Notes, 4th edition. Kaplan Medical.

Brunicaardi FC. 2019. Schwartz's Principles of Surgery, 11th edition, McGraw Hill.

Evaluation

The evaluation will include the entrustable professional activities. The clerkship preceptor will evaluate those relevant to this clerkship experience.

GRADES

This elective is graded Satisfactory/Unsatisfactory.

Note: Students may take the NBME Advanced Surgery Exam for Honors and High Pass consideration.

POLICIES

ACADEMIC DISHONESTY

The University holds its students to the highest standards of intellectual integrity. Therefore, the attempt of any student to pass any examination by improper means, present work which the student has not performed or aid and abet a student in any dishonest act may result in disciplinary action including immediate dismissal. Any student witnessing or observing a perceived violation of academic dishonesty is required to report it as outlined in the Guidelines. Students failing to report an observed violation may also receive disciplinary action.

ATTENDANCE POLICIES

Attendance of lectures and laboratories is based on the University's stated attendance policy. Refer to the Student handbook for more information.

CONDUCT

The University expects all students to be responsible individuals who possess the highest standards of integrity, honesty and personal conduct. These traits are prerequisites to independent learning, professional development, the successful performance of academic and clinical assignments, and the conduct of one's personal life. Accordingly, students are expected to adhere to a standard of behavior consistent with the University's high standards at all times off and on campus. Compliance with institutional rules and regulations, in addition to city, state and federal laws, is expected.

COPYRIGHT POLICY

Trinity Medical Sciences University must respect and observe the right and privileges of copyright holders, obey the United States Copyright Act and preserve the integrity of its internal network systems. All students must sign the technology and software use policy. A copy of this policy may be obtained from the Information and Technology Department.

DRESS CODE

All students are expected to maintain the highest standards of professional appearance at all times. During years one and two and while on campus. Medical students are required to wear scrubs or white coats with appropriate dress. Appropriate dress for clinical students includes business slacks with open-collar shirt for men, and business slacks or skirt with professional shirt or sweater for women.

Trinity School of Medicine Faculty Contact Information

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