TRINITY MEDICAL SCIENCES UNIVERSITY | SCHOOL OF MEDICINE

IMED 604
Hematology/Oncology

Elective Description

This elective is designed to provide students with a thorough exposure to hematology, emphasizing basic science and clinical aspects pertinent to understanding normal function, pathophysiological derangements resulting in disease, and appropriate diagnostic and treatment protocols utilized in addressing diseased states.

Credit: 2-4 semester credits

Prerequisite: IMED 500

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 patent 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 Clerkship Objectives

Medical Knowledge and Patient Care

- Demonstrate the ability to evaluate and manage patients with the following:
    - Anemia, neutropenia, thrombocytopenia and aplastic anemia
    - Coagulation disorders
    - Leukemia and lymphoma
    - Solid tumors, including brain tumors, soft tissue masses and bone masses
    - Acute and chronic sickle cell disease
- Identify emergencies of oncology and the initial evaluation required for the following
    - Fever
    - Neutropenia
    - Tumor lysis syndrome

    - Spinal cord compression
    - Superior mediastinal syndrome
- Identify the common side effects of chemotherapy including the following:
    - Management of pain
    - Management of nausea and vomiting
    - Management of constipation
    - Risk of renal toxicity with certain medications
    - Risk of hepatic toxicity of certain chemotherapy
    - Risk of neurologic toxicity of certain chemotherapy

Professionalism

- Demonstrate respect and empathy for patients and family members.
- Demonstrate an understanding of the code of medical ethics
- Adhere to principles of confidentiality, scientific/academic integrity, and informed consent.
- Review the components of informed consent when working with patients.

Interpersonal and Communication Skills

- Demonstrate the ability to communicate a new diagnosis to a patient and family.
- Observe a physician delivering bad and good news.
- Discuss ways to communicate with and care for a dying patient and the family
- Learn the steps involved in pronouncing the death of a patient and the administrative steps required following the death of a patient in the hospital
- Discuss ways to approach a family for an autopsy.
- Discuss ways to assist a family arranging for a post mortem.
- Recognize the importance of seeking consolation for one's self after being present for a patient's death.

Systems-Based Practice

- Recognize the need for evidence-based, cost-conscious strategies to prevention, diagnosis and disease management.

Detailed Objectives

- Identify clinical signs associated with cytopenias
- Review the etiologies of individual cytopenias
- Be able to interpret a complete blood cell count
- Be able to provide an appropriate differential diagnosis for each cytopenia.
- Recognize the clinical presentations of patients with platelet disorders, factor deficiencies, and thrombotic disorders.
- Interpret basic coagulation screening tests including PT, PTT, and von Willebrand screens
- Identify the long-term complications associated with patients with hemophilia.
- Identify the clinical signs and symptoms of leukemia and lymphoma
- Distinguish between acute and chronic leukemia.
- Describe the different treatment strategies and prognoses of childhood acute lymphoblastic leukemia (ALL) versus acute myeloblastic leukemia (AML).
- Describe an appropriate diagnostic differential for patients who present with lymphadenopathy and/or hepatosplenomegaly.
- Distinguish between Hodgkin lymphoma and non-Hodgkin lymphoma.
- Identify clinical signs of solid tumors
- Recognize that some tumors have specific markers.

- Know the basic initial laboratory and radiologic studies that are required to evaluate a solid tumor.
- Describe the course of sickle cell disease in patients under age 5.
- Describe the management of patients with sickle cell disease and fever.
- Be able to identify signs and symptoms of acute veno-occlusive crises including pain crisis, acute chest syndrome, stroke, splenic sequestration, priapism or hyper-hemolytic crisis.
- Interpret complete blood counts, newborn screen and screening blood tests in patients with sickle cell disease or other common hemoglobinopathies.
- Describe the initial/emergent management of sickle cell patients who present in crisis.
- Interpret lab data associated with tumor lysis syndrome.
- Know which tumor types are most likely associated with particular types of oncologic emergencies.

REQUIRED TEXTBOOKS and Other Resources

Harrison's Textbook of Internal Medicine

Cashen AF and BA Van Tine (eds). 2016. *The Washington Manual® Hematology and Oncology Subspecialty Consult*, 4th ed., Lippincott, Williams, and Wilkins. ISBN 978-0-7817-9156-4.

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.

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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