

Pediatric Hematology/Oncology Rotation for Pediatric Residents

Objectives

To obtain knowledge on various topics in the area of pediatric hematology/oncology and learn to function in a multidisciplinary team in managing complex medical patients.

The hematology-oncology rotation is undertaken in two 4-week-blocks spread over the junior and the senior years of the residency program. Each 4-week-block rotation is split into two 2 week sections; 2 weeks of in-patient service and 2 weeks of out-patient clinics. A mid-rotation evaluation should be completed to assess the progress of the learning objectives.

Medical Expert:

- Basic interpretation of hematologic and coagulation parameters with attention to normal development and changes in reference values.
- Approach to and management of cytopenias (isolated anemia, thrombocytopenia, leucopenia, or mixed).
- Approach to and management of hemoglobinopathies and red cell membrane disorders.
- Approach to and management of patients with potential/confirmed bleeding problems.
- Approach to and management of patients with thrombotic problems.
- Basic concepts in transfusion and use of blood products.
- Approach to and management of lymphadenopathy and hepatosplenomegaly.
- Presentations of common pediatric malignancies and approaches/concepts in their management.
- Initial management of a newly diagnosed hematologic malignancy, with prevention and management of tumor lysis syndrome.
- Common side effects of the commonly used chemotherapeutic agents.
- Common side effects of radiotherapy.
- Management of fever/neutropenia in the immunocompromised patient.
- Management of pediatric oncologic emergencies (mediastinal mass with SVC syndrome, spinal cord compression, hypercalcemia, febrile neutropenia, tumor lysis, hyperleukocytosis)
- Major indications for stem cell transplantation, overall principles of donor selection and patient management.
- Understanding of the basic principles of Phase I, II and III clinical trials in oncology.
- Understanding the indications for bone marrow aspirate/biopsy, lumbar puncture with intrathecal chemotherapy and the ability to perform these procedures.
- Understanding the approach and multidisciplinary input to palliative medicine.

Communicator:

- Develops skills in targeted history taking for a given clinical situation (eg. bleeding history, history compatible with malignancy etc.) from patients of varied ages and families of varied ethnic backgrounds.
- Presents patients in a problem-oriented approach during rounds.
- Expectation: present one round during four week rotation
- Gains experience in dealing with patients/families during stressful periods of life-threatening or chronic illnesses and explaining complex medical situations.
- Communicates and shares insights with the multidisciplinary teams.

Collaborator:

- Collaborates with other health care professionals in the management of patients .
- Collaborates with the patient and family in their care

Manager:

- Learns to manage a multidisciplinary team.
- Learns to manage multiple patients with a variety of diagnoses.
- Learns to organize their time to be effective and efficient in the care of the patients.

Health Advocate:

- Learns to become an advocate for the needs of children of different ages dealing with life-threatening or chronic illnesses, within the family, the hospital and the community.

Scholar:

- Reads current publications on the main topics in hematology/oncology, depending on the patient population at the time.
- Reviews the literature on a topic of interest in order to give a presentation toward the end of the rotation.

Professional:

- Conducts himself/herself in a professional manner with the patients, families, and health care team.
- Recognizes his/her limitations.
- Accepts guidance and supervision from members of the multidisciplinary team.
- Recognizes and respects confidentiality of patients and families.
- Recognizes the moral and ethical issues in making medical decisions.
- Recognizes the importance of informed consent.
- Recognizes the moral and ethical issues related to clinical research involving minors.
- Demonstrates reliability, responsibility, conscientiousness in their work with regards to punctuality, accountability and availability.