



Division of Hematology and Hematologic Malignancies

Adult Hematology Residency Training Program

Goals & Objectives

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Hematology Inpatient Rotation III Foothills Medical Centre

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Hematology Inpatient Rotation III: Foothills Medical Centre

The clinical inpatient rotations at the Foothills Centre will include three x 1month rotations with responsibility for patients with benign and malignant hematologic disorders admitted to the Hematology inpatient service at the Foothills Medical Centre. Each of the rotations will provide incremental responsibility for patient assessment and the clinical management plan and is spaced accordingly through training. Rotation I will be early in the first year of training and will be evaluated at the level of a senior Medical resident/Hematology resident at early training (2 or more months of clinical Hematology exposure, little or no laboratory exposure); Rotation II at the level of a Hematology resident at mid training; **Rotation III at the level of a senior Hematology Resident/Junior Consulting staff).**

Location

1. Nursing unit 57 and 47D at the Foothills Medical Centre, and other units as needed for off-service patients.
2. Emergency department at the Foothills Medical Centre to assess patients for potential admission.

Preceptors

1. Drs. Valentine, Owen, Shafey, Savoie, Bahlis, Jenkins, Duggan, Geddes, Zepeda, Grossman, Rydz, Goodyear, Lee
2. The Hematology staff generally take charge of the Clinical service (inpatient and consultative) for 1week blocks.
3. Preceptors responsibilities include:
 - Direct supervision of resident based patient care. The Preceptor should gauge the level of competence of the resident and allow graduated responsibility for care and graduated degree of direct supervision of clinical decision making on a day to day basis, as described above.
 - Faculty are required to make daily rounds on call on weekends and be immediately available to support resident needs by pager
 - Resident teaching and direct observation of resident performance in the form of bedside clinical rounds and review of resident assessment and care planning.
 - Mini-CEX at least 1/ month or as needed to allow residents to fill their requirements to complete mini-CEX forms

- All teaching faculty are required to contribute to educational rounds covering the topics outlined in the document on curriculum.
- Direct patient care coverage to allow the resident to attend to their mandatory educational and outpatient clinic responsibilities.
- Verbal and written feedback on resident performance.

Resident Responsibilities

- Admission, care planning, daily care and discharge planning for Hematology patients on the inpatient service. The resident is responsible for informing and reviewing with the attending Hematologist all new admissions or major developments in patient status.
- Attendance at clinical care rounds with the preceptor of the week (2-5 days /week depending on the resident's level of expertise and responsibility).
- Supervision and teaching of all more junior resident/clerk staff concurrently on the rotation.
- Attendance at all mandatory educational sessions.
- On-call from home at a frequency of not greater than 1 in 4 nights (see Hematology resident call schedule).
- Attendance at all weekly ongoing longitudinal outpatient clinics (Resident's clinic)

Rotation Specific Objectives

By the end of this rotation the resident will demonstrate the ability to complete the following:

MEDICAL EXPERT/CLINICAL DECISION MAKER

1. The resident will develop evidence-based approaches, **including the assessment and a comprehensive complete short and long term care plan, as well as being able to provide and teach the evidence and rationale for this plan** in the investigation and management of patients presenting with
 - Pancytopenia
 - Febrile neutropenia
 - Lymphadenopathy
 - Leukocytosis (neutrophilia, eosinophilia, basophilia, monocytosis, lymphocytosis)

- Bleeding, bruising
 - Complications of blood product transfusion
 - Venous thrombosis
 - Aplastic anemia (congenital, acquired, pure red cell aplasia)
 - Hemolytic anemia
 - Hemoglobinopathies (i.e. sickle cell anemia and complications)
 - Thalassemias
 - Microangiopathic hemolytic anemias/thrombocytopenia
 - Immune thrombocytopenic purpura
 - Myelodysplastic disorders
 - Plasma cell dyscrasias
 - NonHodgkins lymphomas and chronic lymphocytic leukemia
 - Acute myeloid leukemia including promyelocytic leukemia and leukemia in the elderly
 - Acute Lymphoid Leukemias including Philadelphia chromosome positive ALL
 - Hodgkins lymphoma
 - Hemophilia and Von Willebrand's disease
2. Describe, discuss and **teach** the above disorders in depth in terms of the relevant normal and disordered laboratory findings, pathophysiology, and clinical presentation, and be able to apply this to patient care.
 3. Demonstrate proficiency in eliciting a relevant problem-based, concise, accurate and well-documented history and physical exam including consideration of the aspects of prevention and health promotion, diagnosis and management.
 4. The resident will demonstrate the cognitive and process skills to integrate the information from history, physical exam, diagnostic and procedural investigations to formulate **and initiate a comprehensive management plan** for the patient's hematological problem/disorder, and **adapt the treatment plan as necessary as complications develop**.
 5. The resident will demonstrate proficiency (including knowledge of technical skills, indications, adverse effects/complications, alternative procedures) to **independently perform and teach** the following procedures:
 - Bone marrow biopsy and aspiration
 - Lumbar puncture
 - Intrathecal chemotherapy administration
 6. The resident will demonstrate knowledge necessary for the supervision and appropriate application (including the obtaining of informed consent) of the following procedures:
 - Therapeutic apheresis
 - Transfusion of blood and blood products

- Vaccination or immunization
- Chemotherapy and antibody therapy
- Radiation
- Supportive care including antiemetics, growth factors, antibiotics

COMMUNICATOR

1. The resident will demonstrate a patient-centered approach to communication and an ability to develop therapeutic relationships with patients and their caregivers, considering the impact of factors such as the patient's age, gender ethnic, cultural and socioeconomic background and spiritual values.
2. Provide a concise verbal and written summary evaluation of the patient's history and physical examination and provide accurate and timely documentation for records of daily inpatient care.
3. The resident will accurately and **independently** convey to the patient and family the recommended diagnostic investigations, diagnosis, prognosis, treatment options, complications, and impact on quality of life and develop a common understanding to develop a shared plan of care.
4. Demonstrate proficiency to **independently perform** discussion of care goals and end of life decision making with patients, families, caregivers and medical caregivers in a humane, compassionate and empathetic manner.
5. The resident will be able to effectively manage difficult communication challenges including delivering bad news, and addressing an angry or hostile patient or family, and effectively communicate with patients and families of different cultural backgrounds and languages through the use of available resources.
6. **Lead** the weekly multidisciplinary clinical care rounds, and effectively seek out and maximize the contributions of allied health professionals and other members of the clinical care team to ensure optimal patient care.

COLLABORATOR

1. **Provide leadership** in the weekly care planning rounds with the interdisciplinary team members in a collaborative effort to develop comprehensive care planning for hematology inpatients.
2. Coordinate and communicate specialist consultation referrals where appropriate and ensure followup on specialist recommendations.
3. Effectively communicate with the members of the interdisciplinary team in the resolution of conflicts, provision of feedback and where appropriate be able to assume a leadership role.

4. Effectively delegate and where necessary and demonstrate a good understanding of the principles of team dynamics and leadership in the patient care team.
5. Participate in the coordination of transitional care from inpatient to outpatient facilities including notification of the appropriate interdisciplinary team members, appointment planning and home care support.
6. Collaborate with and participate in ongoing clinical trials involving hematology patients, actively contacting clinical trials staff to ensure they are aware of potential patients and adverse events.

MANAGER

1. **The resident will take on a junior staff role to manage the list of inpatients, assess and provide a diagnostic and treatment plan for each new patient, triage care of ill patients, and manage the care team with the backup support of the hematology staff on call.**
2. Effectively utilize the information technology available to optimize patient care (e.g. electronic patient records, Tom Baker Cancer Centre and hematology tumor group patient data bases, accessing learning materials, quality improvement and patient safety reporting systems).
3. Be aware of and utilize as appropriate, the quality improvement and patient safety reporting systems within Alberta Health Services.
4. The resident will demonstrate effective time management skills in order to balance the responsibilities of inpatient care, attendance at longitudinal outpatient clinics and educational responsibilities.
5. The resident will demonstrate an understanding of management of finite medical resources, and ensure patients are appropriately enrolled in prescription drug programs, as well as the process to make application for special authorization and compassionate release of medications as necessary.

HEALTH ADVOCATE

1. The resident will demonstrate an understanding of how the basic determinants of health will affect outcome of patients with hematologic disease e.g. employment status, social support systems, educational level, community health support systems, nutrition, carcinogen / toxic agent exposure, genetic disease.
2. The resident will **independently and appropriately initiate** referrals to social work, psychosocial services, spiritual care, aboriginal care services, and other

resources to address supports and resources for determinants of health, and **complete paperwork** as indicated.

3. The Hematology resident will identify those patients groups that are at risk of hematologic disease and advocate preventive strategies to keep patients from requiring repeat hospital admission (e.g., community health support, immunization or other prophylactic treatment, appropriate follow-up).

SCHOLAR

1. The resident will develop and implement a personal continuing education strategy with respect to the changing indications, treatment modalities, improvements in care and treatment of complications of hematologic disease.
2. The resident will use the principles of evidence based medicine and critical appraisal in the evaluation of literature pertaining to the diagnosis and treatment of hematological disease.
3. The resident will participate in ongoing clinical trials assessing diagnosis and treatment of hematologic disease **including identifying patients that may benefit from clinical trials, contacting clinical trials staff and ensuring they are informed of adverse events.**
4. The resident will be able to describe the principles of medical education and **initiate and lead** the teaching of junior residents and clinical clerks when they are participating in the hematology inpatient rotations.
5. The resident will attend and participate in the presentation of clinical and educational teaching rounds on the hematology service.

PROFESSIONAL

1. Deliver the highest quality care with integrity, honesty and compassion and will display professional attitudes and behaviors in the care of patients with hematologic disease with and provide care that allows for diversity and considers societal issues that impact care delivery.
2. The resident will use ethical codes of practice when dealing with ethical issues related to hematological disease e.g. end of life care decision making, informed consent, conflict of interest, research ethics, resource allocation, disclosure of harm.
3. The resident will recognize, analyze and develop strategies for dealing with unprofessional behaviors in clinical practice.
4. Demonstrate a commitment to excellence in the clinical practice of hematology.