



*Division of Hematology and Hematologic Malignancies*

## **Adult Hematology Residency Training Program**

Goals & Objectives

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## **Hematology Inpatient Rotation II Foothills Medical Centre**

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## **Hematology Inpatient Rotation II: 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 1 week 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. Develop evidence-based approaches, including the **including the assessment and a comprehensive complete short and long term care plan**, for 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 syndromes
- Plasma cell dyscrasias
- NonHodgkins lymphomas and chronic lymphocytic leukemia
- Acute myeloid leukemia including promyelocytic leukemia and leukemia in the elderly
- Acute lymphoblastic Leukemia including Philadelphia chromosome positive ALL
- Hodgkins lymphoma
- Hemophilia and Von Willebrand's disease

2. Describe and discuss 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 including consideration of the aspects of prevention and health promotion, diagnosis and management.

4. Perform a focused physical examination that is relevant and accurate for purposes of prevention and health promotion, diagnosis, management for the above disorders.

5. Select medically appropriate investigative methods in a resource-effective and ethical manner.

6. Demonstrate the cognitive and process skills to integrate information to formulate a **comprehensive** management plan for the patient's hematological problem/disorder, and **adapt the treatment plan as necessary as complications develop**.

7. Demonstrate proficiency (including knowledge of technical skills, indications, adverse effects/complications, alternative procedures) to **independently** perform the following procedures:

- Bone marrow biopsy and aspiration
- Lumbar puncture
- Intrathecal chemotherapy administration

8. Demonstrate knowledge necessary for the supervision (including obtaining 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. 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.
2. Gather information about the patient's beliefs, concerns and expectations about their hematologic problem and consider the impact of factors such as the patient's age, gender ethnic, cultural and socioeconomic background and spiritual values, to develop a positive relationship with patients and families.
3. Accurately and compassionately 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 in the 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 coordinate 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. Coordinate transition of care from inpatient to outpatient facilities and between care facilities including notification of the appropriate interdisciplinary
6. Collaborate with and participate in ongoing clinical trials involving hematology patients.

## **MANAGER**

1. 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).
2. Be aware of and utilize as appropriate, the quality improvement and patient safety reporting systems within Alberta Health Services.
3. Triage patient care appropriately for acuity and delegate responsibility where appropriate.
4. Demonstrate effective time management skills in order to balance the responsibilities of inpatient care, attendance at longitudinal outpatient clinics and educational responsibilities.
5. Demonstrate an understanding of management of finite medical resources, and ensure patients are appropriately enrolled in drug coverage, 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.

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. Develop and implement a personal continuing education strategy regarding improvements in care and treatment of complications of hematologic disease.
2. 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 **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.