



*Department of Pathology and Laboratory Medicine
Division of Hematology and Transfusion Medicine*

Hematopathology Training Program

SPECIAL COAGULATION

Goals & Objectives and Training Schedule

For:
Contact:

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GOALS & OBJECTIVES

GENERAL OBJECTIVES:

The resident/fellow spends one week in the Special Coagulation Laboratory. It is based at the Diagnostic Science Center (DSC), Calgary Laboratory Services. The emphasis of this rotation is on the appropriate workup of patients with coagulation disorders, interpretation of laboratory results, and clinical consultation.

The resident/fellow obtains histories daily on all patients requiring interpretation of coagulation profiles. These patients are usually being evaluated for DIC, platelet dysfunction, abnormal pre-operative coagulation studies, possible lupus anticoagulants, recurrent thrombosis, generalized bleeding, von Willebrand's disease, hemophilia, other hereditary clotting factor deficiencies, or clotting inhibitors.

General expectations:

1. Become familiar with most clinical clotting problems and able to interpret abnormal findings.
2. Become familiar with how clinical coagulation tests are performed.
3. To know how to choose which coagulation testing methods are needed based on the patient's clinical profile.
4. Exposure to molecular assays associated with hypercoagulation.
5. Maintain current knowledge of the pathophysiology of coagulation disorders.

SPECIFIC OBJECTIVES:

At the completion of training, the trainee will be familiar and will acquire understanding of the following competencies:

Medical Expert/Clinical decision-Maker competencies include:

1. Demonstrate understanding of a role of consultative practice in hematopathology.
2. Demonstrate understanding of the most common coagulation disorders.
3. Demonstrate understanding of the concept of thrombophilia and thrombotic disorders.
4. Demonstrate understanding of the most common platelet disorders.
5. Understands clinical and laboratory diagnosis of anti-phospholipid antibodies/syndrome.
6. Understands principles of diagnostic criteria and classification of Von Willebrand disease.

Lectures available on CLS-G drive:

1. Introduction to hemostasis
2. Thrombophilia
3. Platelet aggregation test
4. Anti-phospholipid antibodies/ syndrome
5. Von Willebrand disease

Communicator:

General Requirements:

- Establish effective working relationships with consulting physicians/hematologists.
- Obtain and synthesize relevant clinical history from physicians, electronic and written health records.
- Listen and respond effectively.
- Discuss in a timely fashion appropriate information with the health care team.

Specific Requirements:

- Understand the role of a hematopathology consultant.
- Act as a consultant to clinical colleagues on the interpretation and relevance of pathological findings, with particular regard to their significance in the management of the patient.
- Understand the role pathologic findings should provide in a given clinical situation and be able to communicate it effectively and in a timely fashion in an oral and written form.
- Assist in the continuing education of clinicians and other members of the health care team.

Collaborator

General Requirements:

- Consult effectively with other physicians and health care professionals.
- Contribute effectively to other interdisciplinary team activities.

Specific Requirements:

- Must have experience in special coagulation haematology sufficient to achieve a sound understanding of the effects of disease and the role of pathology in clinical management.
- Demonstrate the ability to advise on further appropriate investigations and management.

Manager

General Requirements:

- Utilize resources effectively to balance patient care, turn around time, and educational/research needs.
- Allocate finite health care resources wisely.
- Work effectively and efficiently in a health care organization.
- Utilize information technology to optimize patient care, life-long learning and other activities.

Specific Requirements

- Demonstrate knowledge of the principles of laboratory management and administration.
- Demonstrate knowledge of the methods of quality control in the field of special coagulation haematology.
- Demonstrate knowledge of the methods for professional quality assurance as applied to special coagulation haematology.
- Demonstrate competence in basic computer skills with emphasis on automated electronic reporting, electronic communication and search strategies.

Health Advocate

General Requirements:

- Contribute effectively to improved health of patients and communities.
- Recognize and respond to those issues where advocacy is appropriate.
- Understand the role of consult hematopathology in patient's care.

Specific Requirements:

- As members of an interdisciplinary team of professionals responsible for individual and population health care, the consult hematopathologist will endeavour to ensure that laboratory practices and test selection are regularly evaluated to determine that they meet these communities' needs.
- Reinforce to the public and to the profession the essential contribution of laboratory medicine to health.

Scholar

General Requirements:

- Develop, implement and monitor a personal continuing education strategy.
- Critically appraise sources of medical information.
- Facilitate learning of patients, house staff/students and other health professionals.
- Contribute to development of new knowledge.

Professional

General Requirement:

- Deliver highest quality patient care.
- Exhibit appropriate personal and interpersonal professional behaviours.
- Practise medicine ethnically consistent with obligations of a physician.
- Demonstrate the knowledge, skills and attitudes relating to gender, culture, and ethnicity pertinent to special coagulation.

Specific Requirements

- Act as an appropriate role model for students and others.
- Demonstrate a professional attitude to colleagues and other laboratory staff.
- Have an appreciation of the crucial role of the hematopathologist in providing quality patient care. This will include knowledge of an individual professional limitations and the necessity of seeking appropriate second opinions.

SUGGESTED READING:

Denise M, Harmening. Clinical Haematology and Fundamental of Hemostasis (4th ed.).
F.A Davis Company

Kandice Kottke-Marchat. An Algorithmic Approach to Hemostasis Testing CAP 2009

Special Coagulation Rotation Schedule

Date	Time	Description of Activities	Assigned To
<i>Monday</i>	9:00	Orientation and introduction (Lab test) Pre-exam Lecture: Introduction to hemostasis	Dr. Jiang/ Dr. Fourie
	10:30	Lab Orientation and bench work	Lab Tech or Supervisor
	12:00	Lunch Break	
	13:00	Bench work	Lab Tech or Supervisor
	14:30	Case studies: coagulation disorders	Dr. Jiang/ Dr. Fourie
<i>Tuesday</i>	9:00	Lecture: Thrombophilia	Dr. Jiang/ Dr. Fourie
	10:00	Bench work	Lab Tech or Supervisor
	12:00	Lunch break	
	13:00	Bench work	Lab Tech or Supervisor
	14:30	Case studies: thrombotic disorders	Dr. Jiang/ Dr. Fourie
<i>Wednesday</i>	9:00	Sign out session	Dr. Jiang/ Dr. Fourie
	12:00	Lunch break	
	13:00	Bench work	Lab Tech or Supervisor
	14:00	Lecture: Platelet aggregation test Case study	Dr. Jiang/ Dr. Fourie
<i>Thursday</i>	9:00	Lecture: anti-phospholipid antibodies/ syndrome	Dr. Jiang/ Dr. Fourie
	12:00	Hematology Rounds	TBCC Rm CC104
	13:00	Resident academic half day	Residents/fellows
<i>Friday</i>	9:00	Lecture: Von Willebrand disease Case study	Dr. Jiang/ Dr. Fourie
	11:00	Bench work	Lab Tech or Supervisor
	12:00	Lunch Break	
	13:00	Final exam	Dr. Jiang/ Dr. Fourie