OVERVIEW

The Thoracic Surgery selective is based at Health Sciences Centre. Students participate in the surgical management of patients with lung cancer and esophageal cancer, as well as other conditions common to general thoracic surgery practice.

The goal is to provide a closely supervised exposure to all aspects of the practice of Thoracic Surgery, including outpatient and inpatient care, consultation, pre-operative and post-operative care. The clerk is expected to participate in daily ward rounds, outpatient clinics, surgery and the Thoracic Surgery teaching schedule.

INTRODUCTION

Location(s):

Health Sciences Centre

Potential Preceptors:

Attending Surgeons

- Dr. Larry Tan, Associate Professor and Section Head for Thoracic Surgery
- Dr. Sadeesh Srinathan, Associate Professor and Residency Research Director
- Dr. Gordon Buduhan, Assistant Professor and Residency Program Director
- Dr. Biniam Kidane, Assistant Professor and Undergraduate Program Director

LEARNING OBJECTIVES (CanMEDS)

Thoracic surgery is a specialty that deals with surgery for non-cardiac conditions of the thorax. The major focus of the service is thoracic malignancies, which include lung cancer, esophageal cancer, and mediastinal malignancies. We also assess and treat patients with a variety of other conditions, such as pneumothorax, penetrating chest trauma, pleural effusions and empyema, thoracic lymphadenopathy, endobronchial disease, and end-stage pulmonary disease.

Procedures range from minimally invasive and endoscopic surgeries to radical tumour resections and lung transplantation. There is a strong outpatient and operative component to this rotation.

Medical Expert

As Medical Experts, physicians integrate all of the CanMEDS Roles, applying medical knowledge, clinical skills and professional attitudes in their provision of patient-centered care.

After completing this rotation, the Thoracic Surgery clerk will be able to:

- Conduct a history and physical examination, with an emphasis on outpatient assessment.
- Write regular progress notes.
- Formulate a differential diagnosis for common surgical problems.

- Formulate a plan of management for common surgical problems, including investigation and treatment.
- Recognize the acutely ill or injured patient and develop a systematic approach to assessment and management.
- Develop familiarity with the conduct of common thoracic operations.
- Participate in post-operative care of the thoracic surgical patient.
- Develop familiarity with the issues concerning the care of patients with advanced cancer, including palliative care, resuscitation, and sharing bad news.

During this selective, the student will be exposed to most of the following:

- Anatomy and physiology of the lungs, pleural space, and esophagus.
- Diagnostic imaging of the chest, including CT interpretation and CXR interpretation.
- Laboratory procedures used in diagnosis of diseases of the chest, including endoscopy and function studies of the lung and esophagus.
- Pharmacology of drugs commonly used in the management of thoracic diseases, including neoplastic diseases.
- Infectious diseases, especially as they relate to Thoracic Surgery.
- Principles of oncology, including radiation therapy and chemotherapy.

During this selective, the student will have the opportunity to learn:

- General conduct of a surgical procedure, including scrubbing and sterile technique.
- Chest tube or pigtail catheter placement.
- Thoracentesis.
- Simple suturing.
- · Knot-tying.

During this selective, the student will see and work up some or most of these disease presentations:

- Solitary pulmonary nodule.
- Pleural effusion.
- · Hemoptysis.
- Airway obstruction/stridor.
- Dyspnea.
- Thoracic malignancies.
- · Dysphagia.

During this selective, the student will see and work up some or most of these specific disease entities:

- Carcinoma of the lung, including staging, pathology, and management.
- Chronic obstructive pulmonary disease.
- Pneumothorax, hemothorax, and pleural effusions.
- End-stage lung disease, including lung transplantation.
- Infections of the thorax, including pneumonia, bronchitis, empyema, lung abcess, and mediastinitis.
- Penetrating and blunt chest trauma.
- Mediastinal neoplasms.
- Esophageal carcinoma.
- Esophageal motility disorders.
- Gastroesophageal reflux disease.

Communicator

Physicians effectively facilitate the doctor-patient relationship and the dynamic exchanges that occur before, during, and after the medical encounter.

As Communicators, students will facilitate the doctor-patient relation

- Establish rapport, trust and a therapeutic relationship with patients and families.
- Listen effectively.
- Elicit relevant information and perspectives of patients, families, and the health care team.
- Convey relevant information and explanations to patients, families and the health care team.
- Convey effective oral and written information about a medical encounter.
- Maintain clear, accurate, appropriate, and timely records of clinical encounters and operative procedures
- Address challenging communication issues effectively
- Obtain informed consent
- Deliver bad news
- Disclose adverse events
- · Discuss end-of-life care
- Discuss organ donation
- Addressing anger, confusion and misunderstanding using a patient centred approach

Collaborator

Physicians effectively work within a healthcare team to achieve optimal patient care.

As Collaborators, students will work effectively within the surgical team to achieve optimal patient care

- Demonstrate a team approach to health care
- Participate effectively in an interprofessional and interdisciplinary health care team.
- Recognize and respect the diversity of roles, responsibilities, and competences of other health professionals in the management of the surgical patient.
- Work with others to assess, plan, provide, and integrate care of the surgical patient.

Leader

Physicians engage with others to contribute to a vision of a high-quality health care system and take responsibility for the delivery of excellent patient care through their activities as clinicians, administrators, scholars, or teachers.

As Leaders, students will participate in the activities of the surgical service, making decisions, allocating resources, and contributing to the effectiveness of the health care team:

- Employ information technology appropriately for patient care.
- Allocate finite health care resources

Health Advocate

Physicians responsibly use their expertise and influence to advance the health and well-being of individual patients, communities and populations.

As Health Advocates, students will responsibly use their expertise and influence to advance the health and well-being of individual patients, communities and populations.

- Concern for the best interest of patients
- Identifying health needs of individual patients, and advocate for the patient in cases where appropriate
- Promote and participate in patient safety

Scholar

Physicians demonstrate a lifelong commitment to reflective learning, as well as the creation, dissemination, application and translation of medical knowledge.

As Scholars, students will demonstrate a lifelong commitment to learning

- Demonstrate the ability for continuing self-learning
- Discuss the principles of surgery and the application of basic sciences to surgical treatment.
- Demonstrate appropriate presentation skills, including formal and informal presentations.
- Critically evaluate medical information and its sources and apply this appropriately to clinical decisions.
- Critically appraise the evidence in order to address a clinical question.
- Integrate critical appraisal conclusions into clinical care.

Professional

As Professionals, physicians are committed to the health and well-being of individuals and society through ethical practice, profession-Led regulation, and high personal standards of behaviour.

As Professionals, students are committed to health and well-being of individuals through ethical practice, profession-led regulation and high personal standards of behavior:

- Exhibit professional behaviors in practice, including honesty, integrity, commitment, compassion, respect and altruism.
- Demonstrate a commitment to delivering the highest quality care.
- Recognize and respond appropriately to ethical issues encountered in practice.
- Recognize and respect patient confidentiality, privacy and autonomy.
- Participation in peer review
- Manage conflicts of interest
- Maintain appropriate relations with patients.
- Demonstrate awareness of industry influence on medical training and practice
- Recognition of personal and clinical limitation

INFORMATION

Required Reading

This will be discussed with Dr. Kidane at the beginning of the rotation. The goal is to identify texts to which students have access and then identify the pertinent chapters and sections from there.

Suggested Reading

We have a package of review articles that can be picked up at the beginning of the rotation at the Thoracic Surgery Office, GE611. Please return this package at the end of your rotation. These textbooks are available online:

Marko Turina, ed-in-chief, Multimedia Manual of Cardiothoracic Surgery

- Available online at http://www.cts.net.org/sections/journalsandbooks/books/index.html C

 Clifton F. Mountain, Lung Cancer
- Available online at http://www.cts.net.org/sections/journalsandbooks/books/index.html
 Thoracic Surgery Articles, e-Medicine.com
 - Available online at http://www.emedicine.com/med/THORACIC SURGERY.htm
 - This is a listing of both cardiac surgery and general thoracic surgery articles

Oncology Articles, e-Medicine.com

- Available online at http://www.emedicine.com/med/ONCOLOGY.htm
- Please refer to the articles on
 - o Esophageal cancer
 - o Lung cancer, non-small cell
 - Lung cancer, small cell

Pulmonology Articles, e-Medicine.com

- Available online at http://www.emedicine.com/med/PULMONOLOGY.htm
- Please refer to the articles on
 - Solitary pulmonary nodule
 - Pleural effusions

Teaching Unit

The Thoracic Surgery ward is based at Health Sciences Centre on GH6 and GA3.

The Thoracic Surgery clinics (Dr. Tan, Dr. Srinathan, Dr. Buduhan and Dr. Kidane) are held in Clinic "M", Green Owl Zone, 3rd Floor, General Hospital.

Evaluations

- Please arrange an appointment with Dr. Kidane to review the FITER that will be uploaded to OPAL.
- Service evaluation by student is to be handed in at the end of rotation to Surgical Education Office.

Call Responsibilities

Medical students will be assigned second call while on our team. The purpose of this is to enhance educational opportunities, especially as it relates to procedures. First calls will go to the resident or attending surgeon on call. Consults will then be assigned to the medical student with appropriate guidance, followed by review and feedback after consults have been seen.

WARD ACTIVITIES

Expectations

Students should contact Diane Best at 787-3109 to find out the time and place to start the rotation.

Service Activities:

Ward Rounds: usually between 0645 and 0700, but occasionally later. Clerks should discuss the start time for morning rounds with the senior resident.

Clinic Schedule

Dr. Tan Tuesdays 0830 – 1130 Thursdays 1230 – 1600

Dr. Srinathan Mondays 1230 – 1600 Fridays 0830 – 1130

Dr. Buduhan Mondays 0830 – 1130 Thursdays 0830 – 1130

Dr. Kidane Tuesdays 1230 – 1600 Wednesdays 1230 - 1600

Resident Clinic (supervised by all attendings) Fridays 1230 - 1600

Teaching Sessions

Surgery Journal Club

Educational Rounds: Every Wednesday morning at 0700 or 0730, in GH714

Case Conference Rounds: Every Friday morning at 0700, in GH714

Thoracic Surgery Quality Assurance: Quarterly on Wednesday mornings at 0700 or 0730, in GH714

Academic Rounds

Surgery Rounds Thoracic Thoracic Surgery Quality Assurance GH714, HSC Wednesday 0730-0830 or 0800-0900

Surgery Grand Rounds Wednesday 0745-0900 Usually Theatre C or Theatre A, BSB

Thoracic Tumor Conference CancerCare Manitoba Theatre Every 2nd & 4th Wednesday 0900-1000 (conflicts with Seminar Series)

Operating Room Schedule (elective surgery)

Monday - Dr. Kidane

Tuesday - Dr. Buduhan

Wednesday - Dr. Tan

Thursday - Dr. Srinathan

Friday – assignments alternate between the surgeons

Clinics

Clinic "M" Green Owl Zone, 3rd Floor, General Hospital

Dr. Tan Tuesdays 0830 - 1130 Thursdays 1230 - 1600

Dr. Srinathan Mondays 1230 – 1600 Fridays 0830 – 1130

Dr. Buduhan Mondays 0830 – 1130 Thursdays 0830 – 1130

Dr. Kidane Tuesdays 1230 – 1600 Wednesdays 1230 - 1600