GOALS AND OBJECTIVES: PGY4 CARDIOTHORACIC SURGERY RESIDENT ON HUP THORACIC SURGERY SERVICE

Description:
PGY4 residents spend three months as the chief resident on the thoracic service at HUP. Residents become proficient in the preoperative workup, indications, and postoperative care of common general thoracic conditions. They review the case preoperatively with the attending and function as the primary surgeon during the operative procedure. Residents interact and instruct the general surgery interns and medical students rotating on the service. They are responsible for leading the monthly thoracic surgery conference, as well as participating in the weekly thoracic tumor board.

(1) Medical Knowledge
1. Anatomy, physiology, embryology and pathophysiology diseases of the chest wall, mediastinum, lungs, trachea, pleura, esophagus and diaphragm.
2. Radiological evaluation of the chest and esophagus.
3. The technology, interpretation and complications of invasive and noninvasive diagnostic methods, including endoscopic examination, bronchoscopy, mediastinoscopy, respiratory and esophageal function tests, and diagnostic imaging including CT, MRI, and PET scanning.
4. The pathology and treatment of neoplasms of the lung, trachea, esophagus, mediastinum, pleura, and chest wall.
5. The principles and practice of medical oncology and radiotherapy.
6. The pharmacology, including principles of metabolism, action, and toxicity of drugs commonly used in the management of thoracic disease including neoplasia.
7. Sepsis, especially as it applies to the operative care of patients with thoracic or esophageal disease/esophageal perforations.
8. The pathophysiology and management of traumatic injury to the chest wall, pleura and thoracic viscera, including foreign bodies in the respiratory tract or esophagus.
9. Pathophysiology, investigation, and management of the thoracic outlet syndrome.
10. The anesthetic management of the thoracic surgical patient, including preanesthetic evaluation and preparation, and conduct of anesthesia.
11. Principles of postoperative management, including ventilatory support physiology of the thoracic surgical patient.
12. Principles of hemostasis, oncology, and nutrition including hyperalimentation as they apply to the specialty.
13. Principles of surgery for emphysema, including patient selection and operative technique.
14. Understanding of infectious lung disease, including the recognition of pathological specimens.
15. Chest wall abnormalities and the operative techniques for reconstruction.

(2) Clinical Skills
1. Take a relevant history.
2. Perform an acceptable physical exam concentrating on the relevant areas.
3. Arrive at an appropriate differential diagnosis.
4. Order appropriate laboratory, radiological, and other diagnostic procedures demonstrating knowledge in the interpretation of these investigations, especially in the chest x-ray, electrocardiogram, CT, MRI, and PET scan, and PFTs.
5. Arrive at an acceptable plan of management, demonstrating knowledge in the operative and the non-operative management of the disease process.
6. Assess patients in the ambulatory setting and be able to perform the initial interview and assessment of the patient who has been referred for non cardiac thoracic surgery.
7. Manage the patient throughout the hospital stay, including management in an intensive care setting, demonstrating knowledge and ability to anticipate, recognize, and manage potential complications of the disease processes and operative procedures.
8. Provide a plan for patient follow up.

(3) Patient Care
1. The ability as either operating surgeon or first/second assistant to anticipate surgical maneuvers, give and take direction well, make reasonable suggestions, and contribute to a positive operating room atmosphere.
2. Handling of tissues and surgical instruments in an appropriate manner.
3. Demonstrate adherence to sterile technique.
5. Rigid and flexible bronchoscopy – therapeutic and diagnostic.
6. Esophageal endoscopy and biopsy.
7. Surgical management of pleural effusions and infections.
8. Insertion of chest tubes.
9. Pleurodesis (talc and mechanical; open vs. VATS).
11. Decortication.
14. Thoracotomy (posterolateral, including muscle sparing, and Chamberlain procedure).
15. Pulmonary resection including segmentectomy, lobectomy and pneumonectomy.
17. Surgical management of mediastinal tumors.
18. Esophageal resection (transhiatal vs. Ivor Lewis).
19. Claggett window and other open drainage procedures.

(4) Professionalism
1. The ability to be honest, reliable and respectful of the religious, racial, and gender characteristics of patients, their families and other members of the health care team.
2. Understand appropriate personal and interpersonal professional behaviors.
4. The ability to give and receive advice in a manner that is consistent with the harmonious operation of a health care team.
5. An awareness of the medical-legal and ethical aspects of thoracic surgery.
6. An understanding of the obligation of continuing self-education and of teaching others.
7. The ability to keep succinct, pertinent and current medical records.
8. The ability to recognize when to seek assistance from more experienced colleagues.
9. The ability to appreciate the importance of acquiring and maintaining an appropriate professional attitude in order to practice in any specialty.

(5) Interpersonal and Communication Skills
1. Establish therapeutic relationships with patients and families.
2. Obtain and synthesize relevant history from patients and families, and their communities.
3. Listen effectively.
4. Communicate effectively, both written and verbally, with physicians and other health care professionals.
5. Inform patients & families about their condition at an appropriate & understandable level.
6. Be sensitive and respond appropriately to issues of gender, culture and ethnicity in dealing with patients and families.
7. Write a preliminary report on operations on chart.
8. Dictate concise, clear operative reports.
10. Prepare and present ward and ICU rounds in an organized manner.
11. Participate actively in scheduled rounds.

(6) Systems-based Practice
1. Utilize resources effectively to balance patient care and learning needs.
2. Allocate finite health care resources wisely.

(7) Practice-Based Learning and Improvement
1. Develop, implement, and monitor a personal continuing education strategy.
2. Critically appraise sources of medical information.
3. Facilitate learning of patients, house staff/students and other health professionals.
4. Contribute to development of new knowledge.
5. Recognize gaps in knowledge and develop strategies to correct this by self-directed reading, and consulting with other professionals.
6. Contribute knowledge learned to service rounds.
7. Understand principles and practice of basic and applied research including the scientific method, design and conduct of clinical trials, critical appraisal of literature and the use of statistics.
8. Read around clinical cases.
9. Prepare and present scheduled rounds.
10. Participate actively in scheduled quality assurance conferences (M and M conferences).
11. Participate effectively in teaching fellow professionals including junior house staff.
Method of assessment of resident academic performance

1. End of rotation online evaluation
2. Yearly in-service training exam.
3. Bi-annual case log review