

RESPIRATORY MEDICINE ROTATION OBJECTIVES

MEDICAL EXPERT

Given a patient with cough, shortness of breath, chest pain, hemoptysis, purulent sputum, wheeze, stridor or sleepiness the resident will be able to:

1. Elicit a history relevant to the respiratory system. This includes:
 - a) symptoms which indicate respiratory pathology.
 - b) history relevant to common respiratory disorders.
 - c) occupational exposures.
 - d) geographical details including risks for TB.
 - e) exposure history relevant to pulmonary infection.
 - f) Systemic diseases with pulmonary manifestations including HIV, CTD.
 - g) A sleep history
2. Accurately perform a physical exam in diagnosis of respiratory disorders.
3. The resident will discuss the diagnostic value of these physical signs.
4. Order investigations appropriately including sputum gram stain and cultures, sputum cytology, leg dopplers, lung scans, CXR, CT chest, spirometry, full PFTs, oximetry, screening tests for sleep disordered breathing and ABGs. The resident will interpret these tests in the context of the patient problem.
5. The resident will order and justify initial management based on his/her comprehensive assessment. The resident will modify the management based on the initial response to therapy.

Given a patient with the following diseases the resident will be able to discuss the epidemiology, prevention, pathogenesis, clinical manifestations, differential diagnosis, laboratory testing, CXR findings, treatment (outpatient and inpatient), prognosis and complications. The resident will justify his/her approach using the literature.

These diseases include:

- asthma
- chronic obstructive pulmonary disease
- pneumonia
- thromboembolic disease
- lung cancer
- OSA
- ILD

The resident will formulate a plan to diagnosis and manage the following common pulmonary problems. The resident will be able to correctly interpret the CXR from patients with these clinical presentations. The resident will justify their diagnostic and therapeutic approach using the current literature.

- unexplained dyspnea
- solitary lung nodule
- preoperative respiratory assessment
- CO2 retention
- hypoxemia
- chest pain
- hemoptysis
- cough
- pleural effusion
- SOB in pregnancy

The resident will be able to independently manage the following emergency situations. This includes the initial resuscitation including the treatment of hypercapnea and hypoxia with non-invasive mechanical ventilation(when appropriate).

- status asthmaticus
- acute respiratory failure
- acute pulmonary edema
- acute upper airway obstruction
- pneumothorax

The resident will be able to perform the following procedures. The resident will justify how the procedure will improve patient management. The resident will discuss with the patient the indications for the test and possible complications. The resident will interpret the results of the fluid obtained by the procedure.

- thoracentesis
- chest tube insertion
- chemical pleurodesis
- arterial puncture for blood gas measurement

The resident will observe performance of the following diagnostic tests. The resident will explain the indications and complications for these tests.

- pleural biopsy
- spirometry
- sputum induction
- measurement of diffusing capacity and lung volumes
- exercise testing
- bronchoscopy
- bronchoalveolar lavage
- transbronchial lung biopsy
- transbronchial needle aspiration

COMMUNICATOR

Given a patient with pulmonary disease or symptoms the resident will be able to:

1. Provide a verbal and written summary evaluation of the patient's pulmonary and medical problems. The resident will be able to justify their suggestions as a consultant. Keep accurate records of daily inpatient care as well as outpatient care.
2. Explain to the patient his/her pulmonary condition and the proposed plan for investigation and management
3. Outline the potential risks and benefits of any treatment.
4. Obtain informed consent for pulmonary procedures using the principles of disclosure, capacity and voluntariness.
5. When dealing with patients for whom treatment options are limited the resident will discuss end-of-life care and wishes, taking into account different cultural issues related to death and dying

COLLABORATOR

1. Be able to maintain collegial relationships with colleagues, nurses, RT and secretaries.
2. Be able to maintain collegial relationships with para-medical personnel. The resident will function as a team member with RTs including when dealing with patients that require supplemental O2, nebulisers, or BIPAP.
3. The resident will work in collaboration with the asthma educators to provide state of the art asthma education.

HEALTH CARE ADVOCATE

1. Given a smoker the resident will be able to give staged matched advice and treatment for smoking cessation.
2. The resident will be aware that there are global, national and regional initiatives for a tobacco free world.
3. The resident will be aware that there are global initiatives for the elimination of TB.
4. The resident will order DVT prophylaxis and justify their prophylactic treatment.

MANAGER

1. When asked to assess several new patients simultaneously the resident will be able to priorities according to the level of acuity (i.e. triage of patients)
2. When multiple tasks require attention the resident will be able to divide these appropriately among colleagues (including clinical clerks) and provide supervision of their activity.
3. When multiple patients require use of limited resources (CT scan chest) the resident will be able to provide the laboratories with direction in terms of patient priority for each test.

4. The resident will be able to manage his/her time so that clinical responsibilities do not interfere/overlap with mandatory participation in educational activities.
5. The resident will consider socioeconomic (cost) issues in selecting medications for patients .

SCHOLAR

1. The resident will identify learning needs and make use of available learning resources and resource faculty.
2. The resident will participate in bedside teaching provided by attending respirologists
3. The resident will present interesting, unusual or difficult cases at the city wide respirology rounds.
4. When confronted with a difficult clinical problem the resident will research the current literature
5. The resident will provide clinical and didactic teaching to clinical clerks, residents and faculty on the same rotation. This includes presenting an interactive noon round for the MTU (for residents rotating at the PLC).

PROFESSIONAL

1. The resident will display professional attitudes and behaviors, including:
 - the resident will be punctual for rounds, family conferences, and educational events.
 - the resident will follow through on assigned tasks
 - the resident will be respectful when dealing with patients, families, and other professionals.
2. The resident will consider racial and cultural issues in selecting treatment regimens for patients.