PULMONARY ROTATION

Faculty:

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Goals:

1. Develop competency in the evaluation and management of relevant clinical pediatric pulmonary problems, including the formulation of differential diagnoses and diagnostic and therapeutic management plans.

2. Develop proficiency in basic chest radiographic interpretation.

3. Develop proficiency in the interpretation of basic pulmonary function tests.

Learning Objectives:

1. Perform a thorough respiratory history and physical examination within the context of the whole child and the family setting.

2. Understand how to distinguish normal from pathological pulmonary conditions.

3. Recognize the signs and symptoms of common pediatric respiratory diseases.

4. Formulate optimum treatment plans for common pediatric respiratory diseases.

5. Understand the role of the health care team in chronic respiratory diseases.

6. Appreciate the role of pulmonary function testing and flexible bronchoscopy in the evaluation and management of respiratory diseases.

Curriculum content:

1. Problems managed independently by a pediatrician.
   a. croup
   b. uncomplicated asthma
   c. uncomplicated bronchiolitis
   d. uncomplicated pneumonias
   e. pneumonia complicated by a pleural effusion
   f. chronic cough
   g. mild congenital stridor
   h. GE reflux-related lung disease
   i. Uncomplicated apparent life threatening event (ALTE)

2. Problems managed by general pediatricians with consultation
   a. persistent wheezing, unresponsive to usual therapy
   b. upper airway obstruction of unusual etiology, such as airway hemangioma, including obstructive sleep apnea
   c. tracheostomy care

3. Problems referred to subspecialist:
a. epiglottitis
b. acute respiratory failure of any cause
c. foreign body aspiration
d. hemoptysis
e. severe upper airway obstruction
f. severe status asthmaticus unresponsive to usual therapy
g. abnormalities of control of breathing
h. pneumonia not responsive to treatment

4. *Emergent* problems that the pediatrician must recognize, stabilize and refer:
   a. acute respiratory failure of any cause
   b. severe status asthmaticus unresponsive to usual therapy
   c. severe upper airway obstruction
   d. massive hemoptysis

5. Problems referred for *team management*:
   a. cystic fibrosis
   b. bronchopulmonary dysplasia
   c. difficult asthma

**Skills Acquisition:**

1. Technical skills for the pediatrician:
   a. Thorough examination of the respiratory tract, including observation, percussion and auscultation.
   b. Knowledge of techniques and indications for chest physiotherapy and postural drainage.
   c. Indications and techniques of delivering aerosols by nebulizer and inhaler
   d. Routine tracheostomy care

2. Laboratory interpretation skills:
   a. arterial and capillary blood gases
   b. pulse oximetry
   c. simple spirometry and lung volumes (FVC, FEV, FRC, TLC)
   d. pleural fluid analysis
   e. sputum gram stain and culture
   f. sweat test results
   g. chest radiograph interpretation

**Reading Materials:**

1. Chermick, *Disorders of the Respiratory Tract in Children*
2. Articles as appropriate for patients seen.

**Rotation Requirements:**

i. The teaching program consists of three components:
   6. the inpatient service which consists of both primary patients and consults
7. the outpatient clinic
8. the pulmonary function lab

An optional component also includes an outpatient Cystic Fibrosis Clinic at Tulane School of Medicine.

j. The resident/intern is expected to participate in rounds on the inpatient service Monday-Friday during the rotation. Patient assignments are made at the discretion of the Attending Physician. It is expected that the housestaff on this rotation will see and evaluate their patients prior to morning rounds. The Attending Physician will assign new patients and new consults and these patients should be evaluated on the same day.

The outpatient clinic schedule is outlined below:

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<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
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<tbody>
<tr>
<td>Pulmonary</td>
<td>Metarie</td>
<td>Kolls (9-12)</td>
<td>GHL</td>
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<tr>
<td>Clinic (1-4)</td>
<td>Clinic (9-12)</td>
<td>1st and 3rd of the month</td>
<td>2nd and 4th of the month</td>
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