

THE DIAGNOSIS, TREATMENT, AND MANAGEMENT OF IN THE PEDIATRIC PATIENT ASTHMA



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What is Asthma?

- Asthma is a chronic inflammatory disease of the airways.



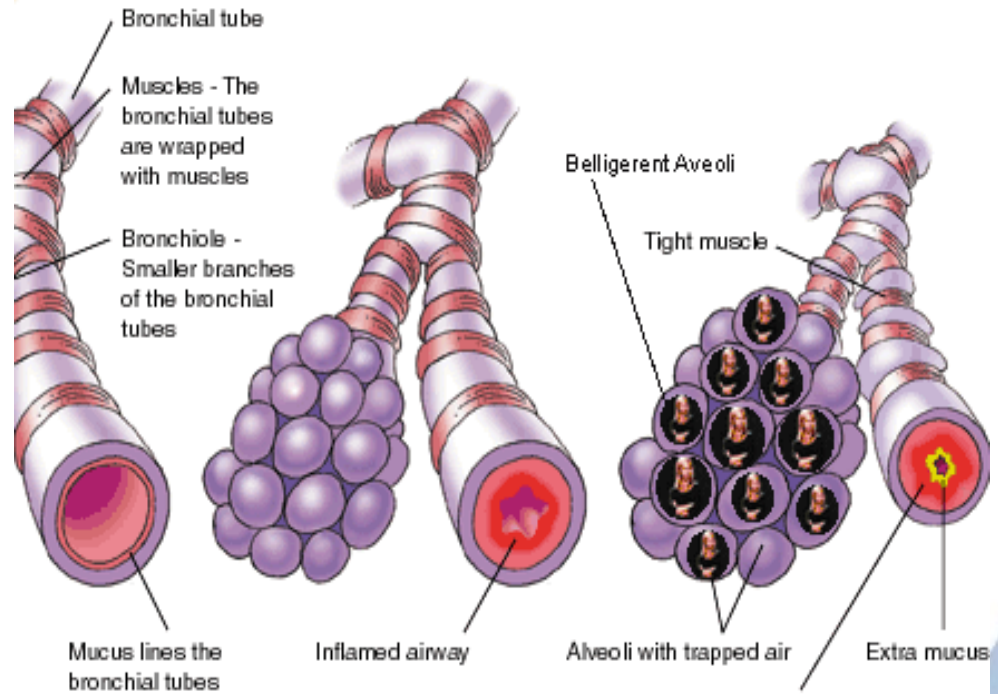
Pathology

- Chemical mediators
(histamine, leukotrienes, prostaglandins)
- Released from Mast cells, Macrophages, Eosinophyls, and Neutophils.

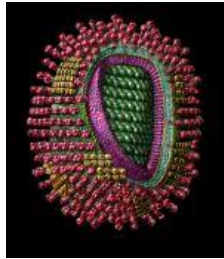


Airway Changes

- Airway hyper responsiveness
- Exaggerated bronchoconstrictor response
- Airflow obstruction
 - Acute bronchospasm
 - Airway edema
 - Chronic mucus plug formation
 - Airway remodeling



Triggers



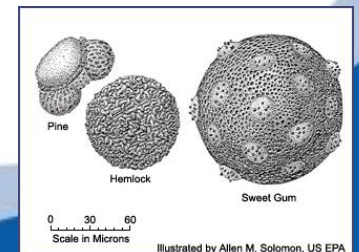
- Atopic

- animals
- pollens
- foods
- dust
- dust mites
- cockroach feces



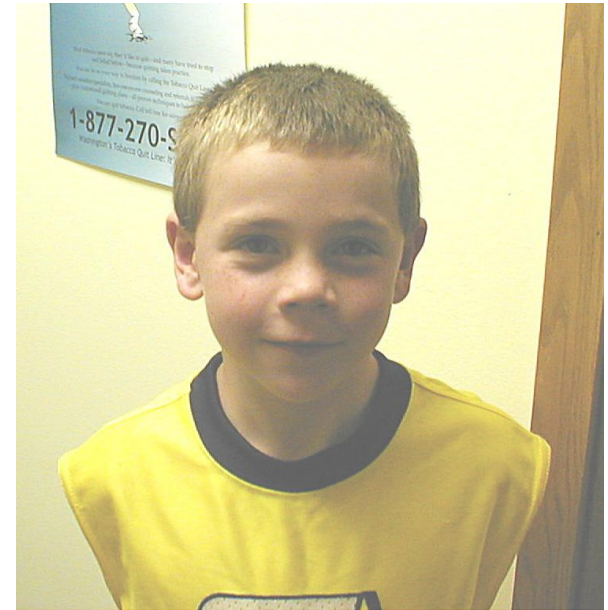
- Non-atopic

- bacterial, viral infection
- emotion
- exercise
- irritants
- ASA
- changes in weather
- menses



Symptoms

- Cough
- Wheeze
- Chest tightness
- Shortness of breath
- Chest pain
- Signs of respiratory distress



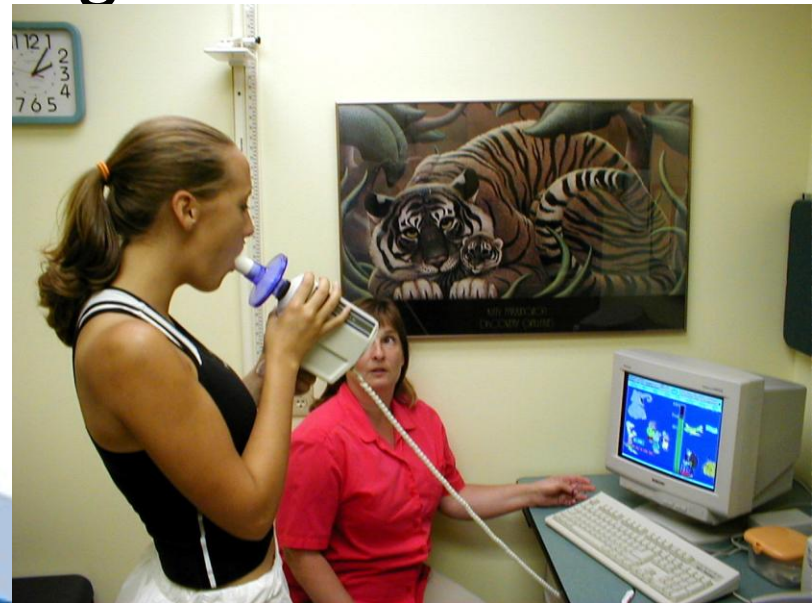
Classifications

- Mild Intermittent
- Mild Persistent
- Moderate Persistent
- Severe Persistent



Diagnosis

- History and Physical
- Pulmonary Function Testing
- Methacholine Challenge
- Peak Flow Meters



Management

- Medications
 - Rescue
 - Controller
- Education
- Frequent follow-up



Goals

- Limit school absenteeism
- Limit emergency room visits
- Improve exercise tolerance
- Infrequent night awakenings
- Medication compliance
- Improve self esteem
- Decrease mortality

