

Mechanisms of Human Disease I

Clinical Approach to Obstructive/Restrictive Lung Disease
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Learning Objectives

1. Compare and contrast obstructive and restrictive lung disease as regards the underlying abnormal physiology and expected physical exam, CXR, and PFT findings
2. Correctly diagnose Asthma, COPD, and Bronchiectasis on the basis of clinical presentation, radiographic studies, and pulmonary function test results.
3. Summarize the underlying inflammatory nature of Asthma
4. Distinguish between Mild Intermittent Asthma vs Persistent Asthma and appreciate the implications for choosing appropriate medications for both.
5. Cite the class of medications for first line management of Asthma as well as the options for second line therapy; summarize principles of "stepwise management" for patients with asthma.
6. Recognize Cough Variant Asthma, Exercise Induced Asthma, contributors to asthma including post-nasal drip and GERD, and Allergic Bronchopulmonary Aspergillosis.
7. Describe core tenets of COPD management including smoking cessation, oxygen assessment, and pulmonary rehabilitation along with the medication options for managing COPD.
8. Appreciate the combined impact of bacterial colonization, inflammation, airway distortion, and abnormal mucus clearance contributing to the development of bronchiectasis and the implications for therapeutic intervention.
9. Describe the clinical presentation including symptoms and CXR/PFT data expected in patients with interstitial lung disease.
10. Cite common causes of interstitial lung disease including sarcoidosis, usual interstitial pneumonitis, connective tissue diseases, environmental exposures, and drugs.
11. Describe the common presentations of sarcoidosis and the role of corticosteroids in its management.
12. Describe the clinical presentation, including typical physical exam and high resolution CT scan findings, diagnostic approach, prognosis, and treatment options for patients with usual interstitial pneumonitis.