

Respiratory Pathology

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1. Introduction

- Respiratory pathology examines diseases of the airways, lungs, and pleura.
- These disorders impair gas exchange and oxygen delivery.

2. Obstructive Diseases

- **Asthma:** reversible airway narrowing from inflammation and bronchospasm.
- **COPD:** chronic, progressive airflow limitation, including emphysema and chronic bronchitis.
- These reduce the ability to exhale air fully.

3. Restrictive and Infectious Diseases

- Restrictive diseases like pulmonary fibrosis reduce lung expansion.
- **Pneumonia:** infection causing alveolar inflammation and fluid accumulation.
- Tuberculosis is a chronic bacterial infection forming granulomas.

4. Vascular and Neoplastic Disorders

- **Pulmonary embolism:** a clot blocking pulmonary arteries.
- Lung cancer, strongly linked to smoking, is often aggressive.
- Pleural effusion is fluid accumulation in the pleural cavity.

5. Clinical Features

- Common signs include cough, dyspnea, wheezing, and hypoxia.
- Diagnosis uses chest imaging, spirometry, and sputum tests.
- Management targets the cause and supports breathing.