

Pathology sites

Note: These are the main sites, some of these conditions can occur elsewhere

Pathology	Site
Centriacinar emphysema	Upper lobes
Panacinar emphysema	Lower zones
Distal acinar emphysema	Upper half near the pleura
Bullous emphysema	Subpleural
Chronic bronchitis, asthma, bronchiectasis	Bronchi and bronchioles
Hypersensitivity pneumonitis	Upper lobe (in chronic disease)
Idiopathic pulmonary fibrosis	Lower lobe and subpleural regions and along the interlobular septa
Coal Worker's Pneumoconiosis	Upper lobes
Silicosis	Upper lobes
Asbestosis	Lower lobes
Idiopathic chronic eosinophilic pneumonia	Periphery of the lung
Adenocarcinoma and Adenocarcinoma in situ	Usually peripherally
Squamous Cell Carcinoma	Centrally
Small Cell Lung Carcinoma	Centrally
Primary TB	Upper lobes or upper parts of lower lobes
Secondary TB	Apex of the lung
Pulmonary infarct	Most in the lower lobes

Paraneoplastic syndromes

Tumor	Paraneoplastic syndrome
Squamous cell carcinoma	Increased PTH – hypercalcemia Finger clubbing
Adenocarcinoma	Finger clubbing
Small cell carcinoma	Increased ACTH – Cushing Increased ADH Acromegaly
Carcinoid	Cushing Acromegaly

Notes

- ✓ Contraction atelectasis is irreversible
- ✓ ARDS → Hyaline membrane
- ✓ Irregular emphysema is the most common type
- ✓ Distal acinar emphysema is the most common cause of spontaneous pneumothorax in young adults
- ✓ Asthma → Eosinophils, Curschmann spirals, Charcot-Leyden crystals
- ✓ Cystic FIBROSIS causes bronchiectasis so it is an obstructive disease, not restrictive
- ✓ Sarcoidosis → CD4+ cells found in lavage.
Hypersensitivity pneumonia → CD4+ and CD8+
- ✓ Erythema nodosum → Painful, no granuloma
Subcutaneous nodules → Painless, with granuloma
- ✓ Sicca syndrome: Inflammation in lacrimal gland
- ✓ Mikulicz syndrome: uveoparotid inflammation
- ✓ Sarcoidosis: Schauman bodies (Ca + proteins), and asteroid bodies
- ✓ The only definitive treatment for Idiopathic pulmonary fibrosis is lung transplant
- ✓ PMF can be a complication of any type of pneumoconiosis
- ✓ Crystalline silica is more dangerous than amorphous one
- ✓ Asbestosis: Asbestos bodies(iron+protein), pleural plaques(Ca + protein), high association with lung cancer and higher with mesothelioma
- ✓ Hamartoma → coin lesion
- ✓ Small cell carcinoma → Resistant to surgery, sensitive to chemotherapy.
Other carcinomas → The opposite
- ✓ Squamous cell carcinoma → Keratin pearls, Intercellular bridges
- ✓ Small cell carcinoma → Salt and pepper, crush artifact, nuclear molding, Azzopardi effect

- ✓ Large cell carcinoma is undifferentiated
- ✓ Ghon focus: Gray-white consolidation in the lung
- ✓ Ghon focus + consolidation in lymph nodes = Ghon complex
- ✓ Secondary TB has less LN involvement and more cavitation, compared to Primary TB
- ✓ Large embolus → Saddle embolus or death
Small embolus → Nothing, or alveolar hemorrhage
- ✓ Goodpasture syndrome → Anti basement membrane antibodies
- ✓ Granulomatosis with polyangiitis → ANCA antibodies

Good Luck!!