



Tikrit University
College of Veterinary Medicine

Respiratory system disorder

Subject name: Practical Pathology

Subject year: 2024-2025

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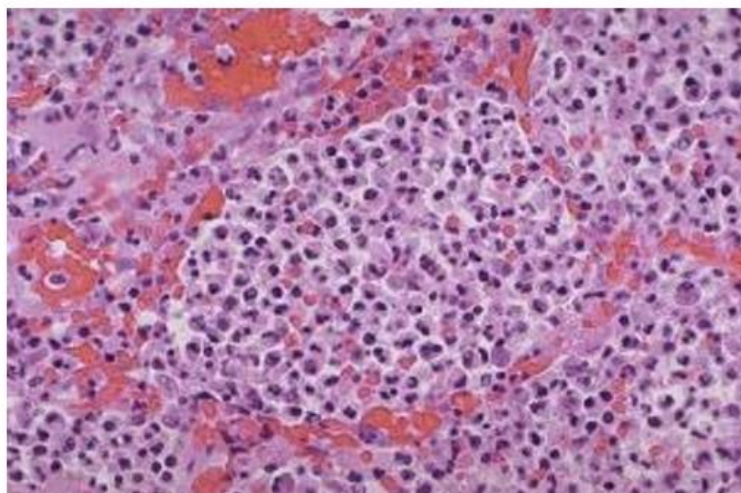
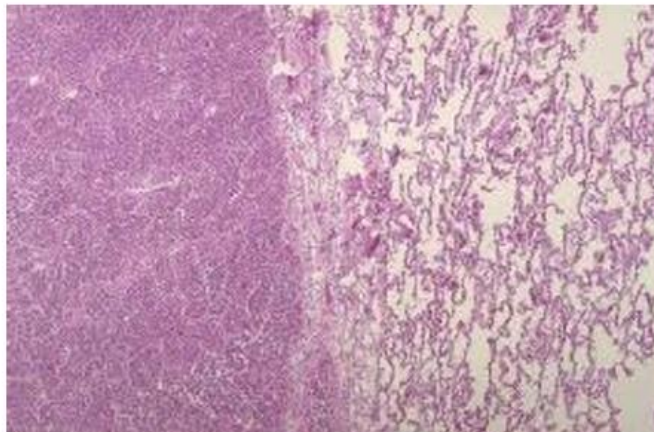
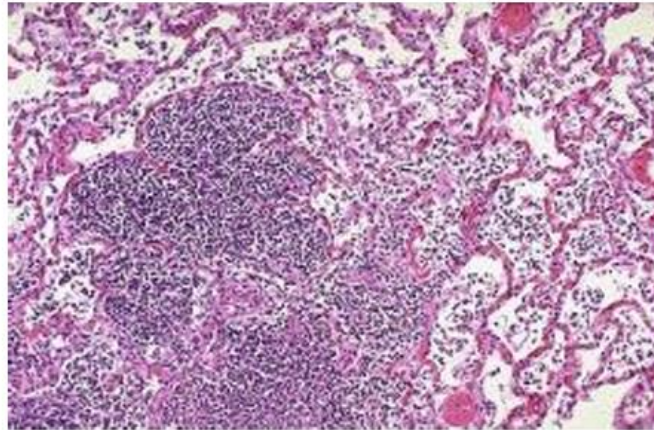
SCAN ME

Lecturers link

Organ: lung

Lesion: The section shows, the alveoli are filled with a neutrophilic exudate and few red cells. The alveolar structure is still maintained, eosinophilic oedema fluid in the air spaces. Dilatation and congestion of the capillaries in the alveolar walls.

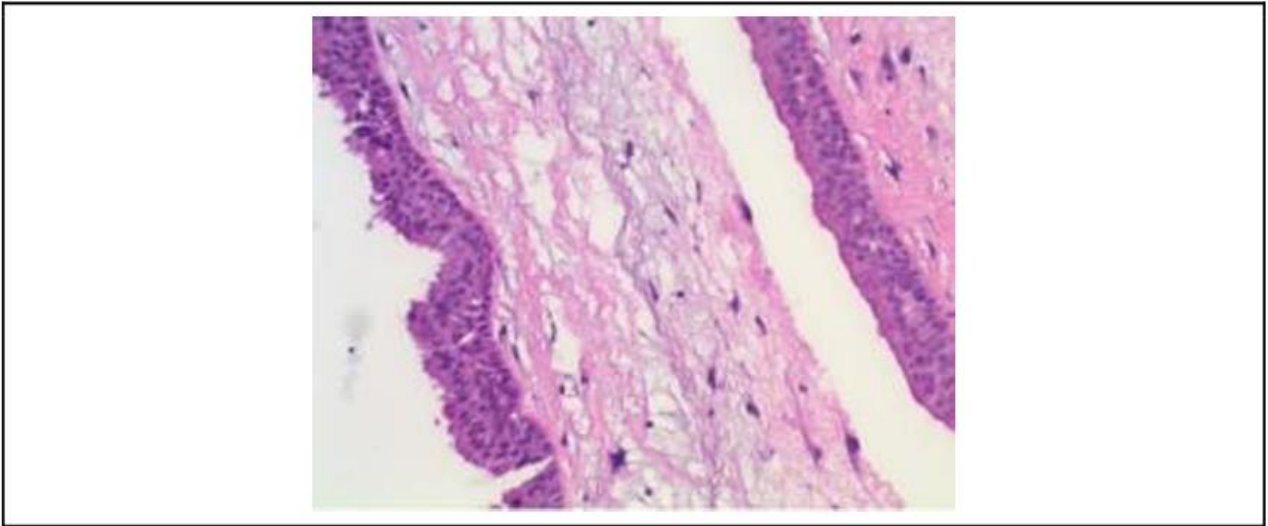
Diagnosis: pneumonia



Organ: Nasal

Lesion: The section shows, thin surface mucosa with no thickened basement membrane. May have prominent eosinophils, plasma cells, and dilated vessels with thrombosis, and marked sub-mucosal edema resulting in extensive clear space between sub-mucosal connective tissue fibers.

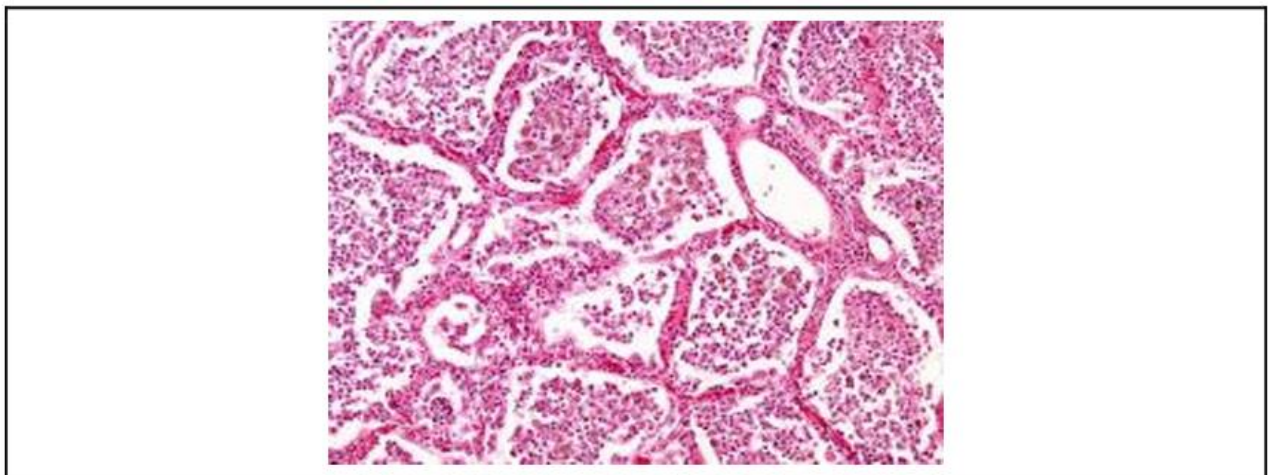
Diagnosis: Nasal polyp

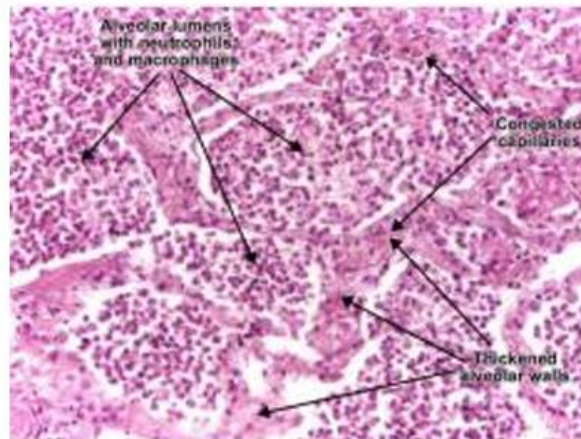
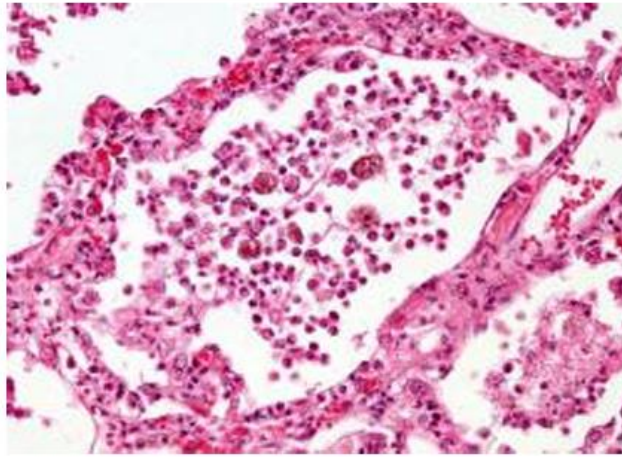


Organ: Lung

Lesion: The section shows, inflammatory infiltrate throughout the entire lobe. Massive confluent exudate with intra-alveolar neutrophils, red cells, thickened of alveolar wall, and fibrin (Red hepatization), with fibrino-suppurative exudate (Gray hepatization).

Diagnosis: Lobar or croupous pneumonia

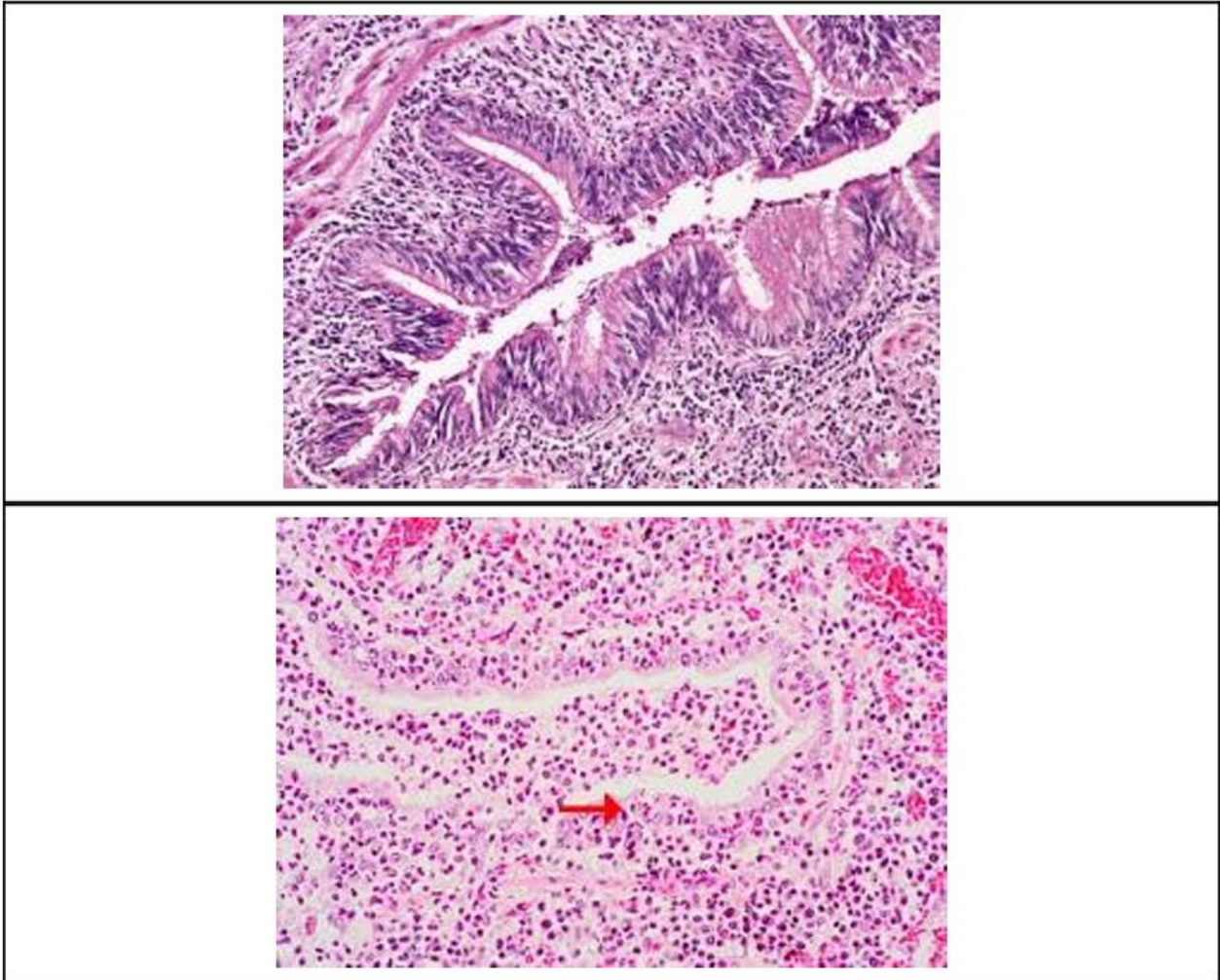




Organ: Lung

Lesion: The section shows, the bronchial epithelium may be normal or may show squamous metaplasia. The bronchial wall shows infiltration by inflammatory cells and destruction of normal muscle and elastic tissue with replacement by fibrosis, with shows changes of interstitial pneumonia.

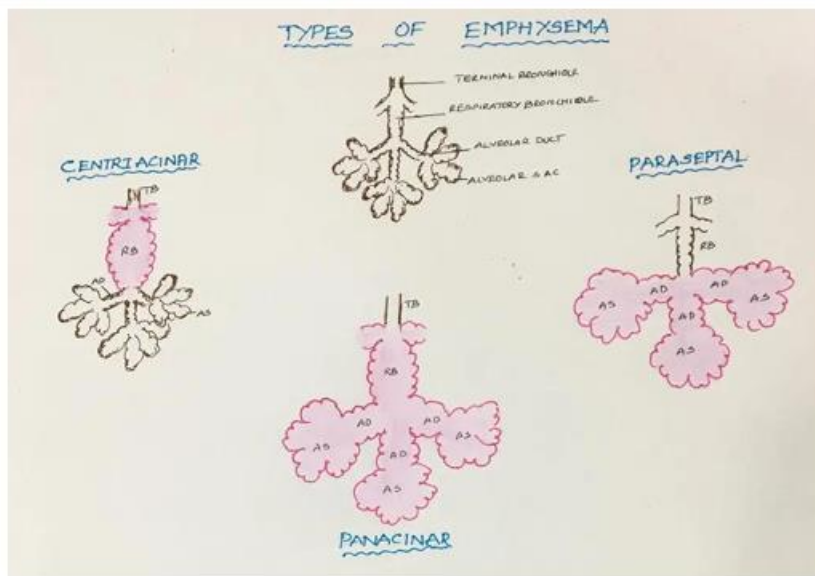
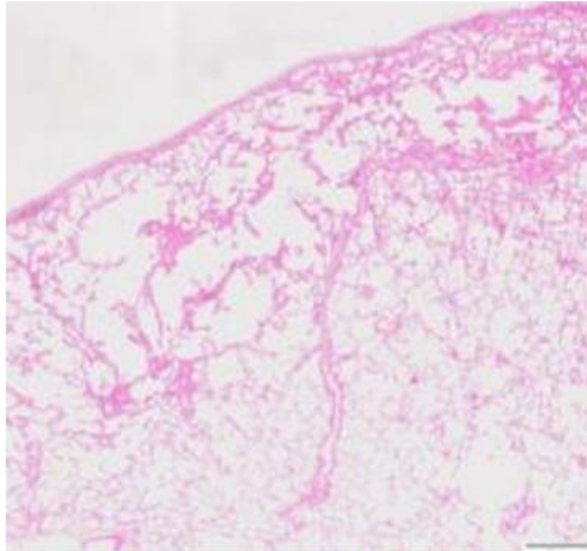
Diagnosis: Bronchiectasis



Organ: Lung

Lesion: The section shows, the loss of alveolar walls with emphysema, and remaining airspaces are dilated. Distension and destruction of the respiratory bronchiole in the center of lobules, surrounded peripherally by normal uninvolved alveoli. The terminal bronchioles supplying the acini show chronic inflammation and are narrowed.

Diagnosis: Centriacinar emphysema (CENTRILOBULAR)

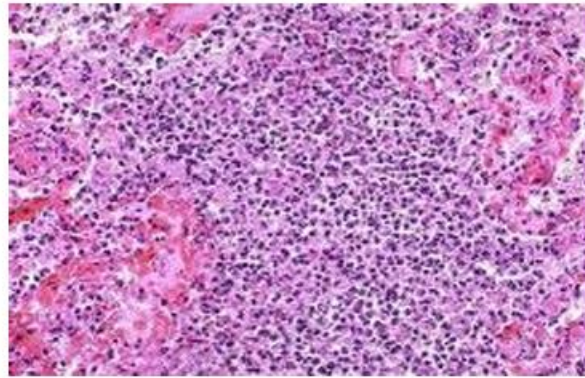
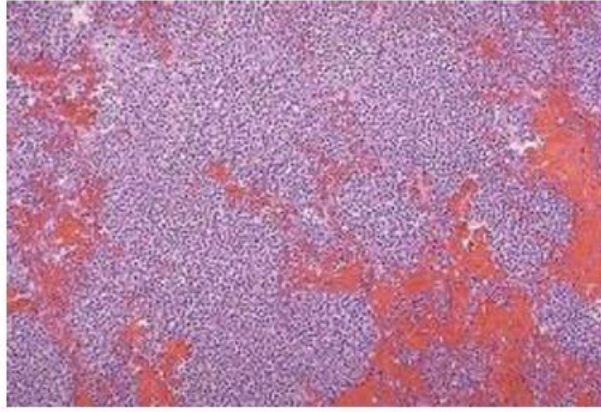


CENTRIACINAR EMPHYSEMA: Involvement of central or proximal part of the acinus whereas distal part is spared
PANACINAR EMPHYSEMA: All portions of the acinus are affected
PARASEPTAL (DISTAL) EMPHYSEMA: Involves only distal part of acinus whereas proximal part is normal

Organ: Lung

Lesion: The section shows, Destruction of lung parenchyma (alveolar walls) due to abscess formation with suppurative exudate in the lung cavity, and hemorrhage. The cavity is initially surrounded by inflammatory cell, and may be forming a fibro collagenic wall.

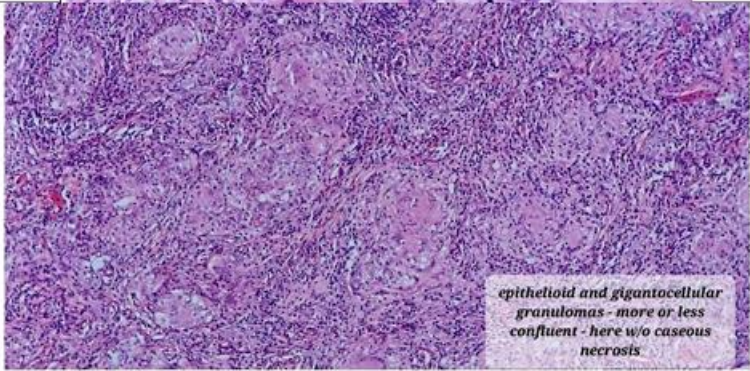
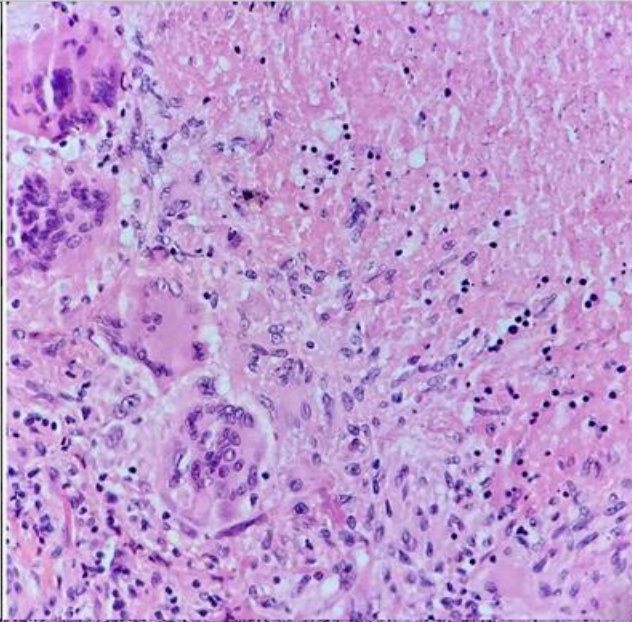
Diagnosis: Lung abscess



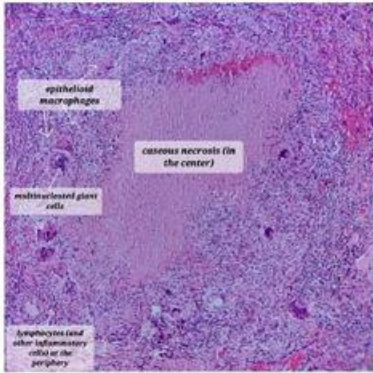
Organ: Lung

Lesion: The section shows, Hallmark is necrotizing granulomatous inflammation, composed of central necrotic zone surrounded by epithelioid histiocytes with varied number of multinucleated giant cells and lymphocytes.

Diagnosis: Miliary tuberculosis (TB)



epithelioid and giantcellular granulomas - more or less confluent - here w/o caseous necrosis

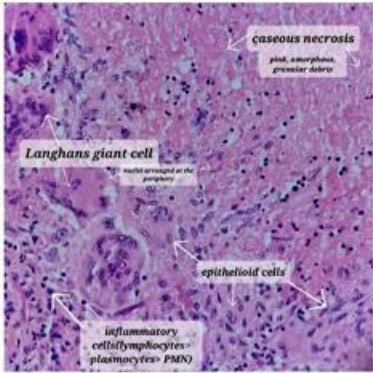


epithelioid macrophages

caseous necrosis (in the center)

multinucleated giant cells

lymphocytes and other inflammatory cells at the periphery



caseous necrosis

pale, amorphous, granular debris

Langhans giant cell

nuclei arranged in the horseshoe

epithelioid cells

inflammatory cells (lymphocytes + plasma cells + PMN)