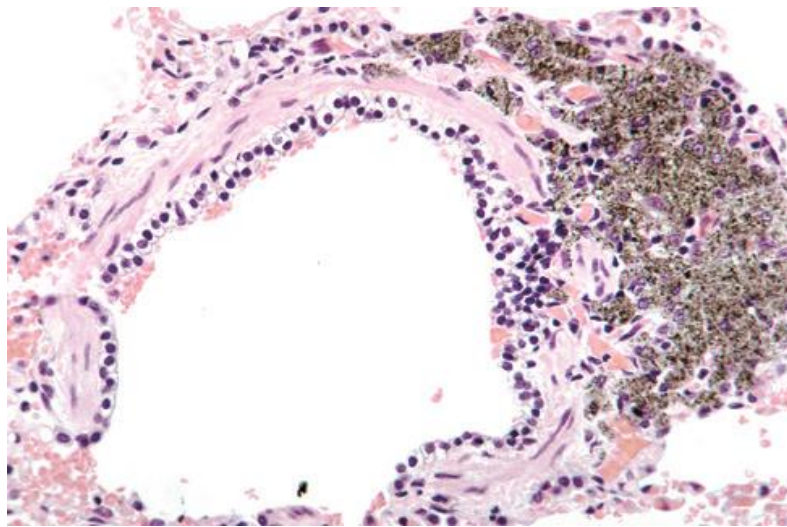


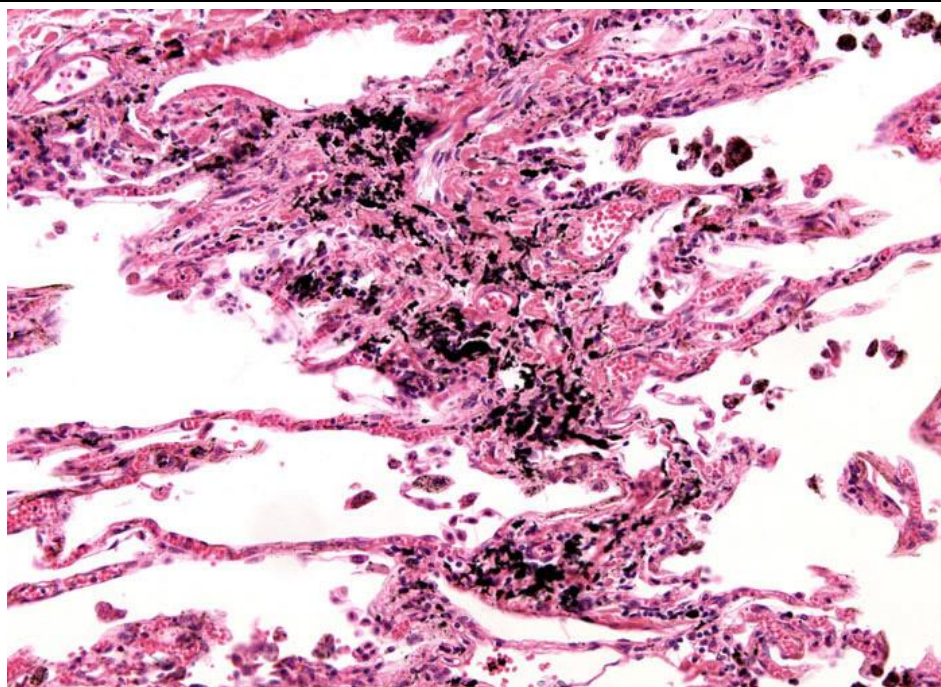
Organ: Lung

Lesion: The histopathological examination shows, inhaled dusts appear as fine black granular material and crystalline material in macrophages in extracellular tissues adjacent to intrapulmonary airways and vasculature or in epithelial lining of bronchioles.

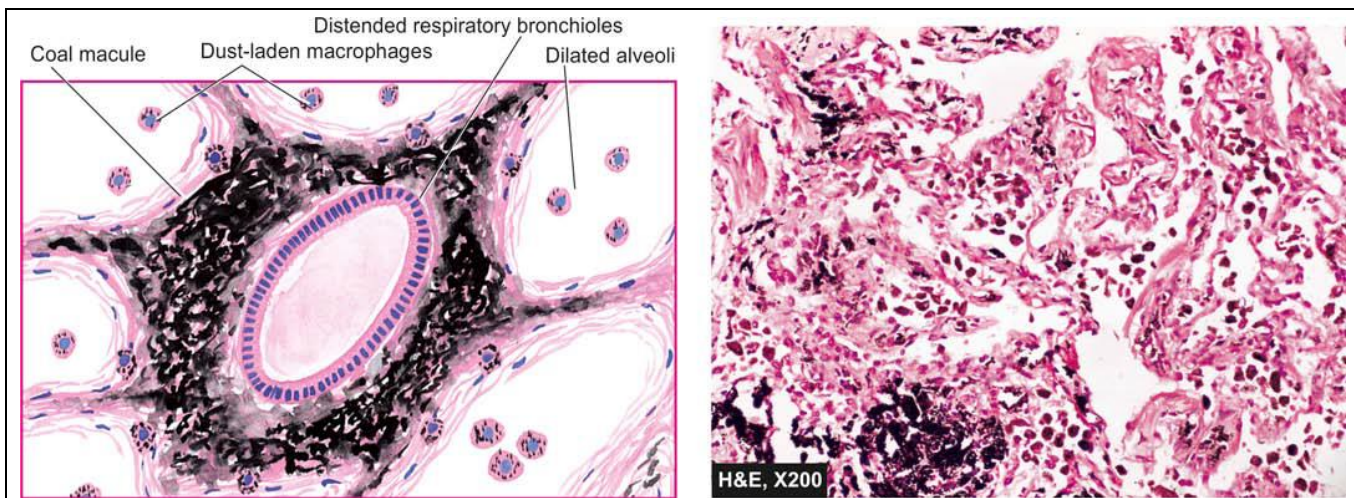
Diagnosis: Anthracosis



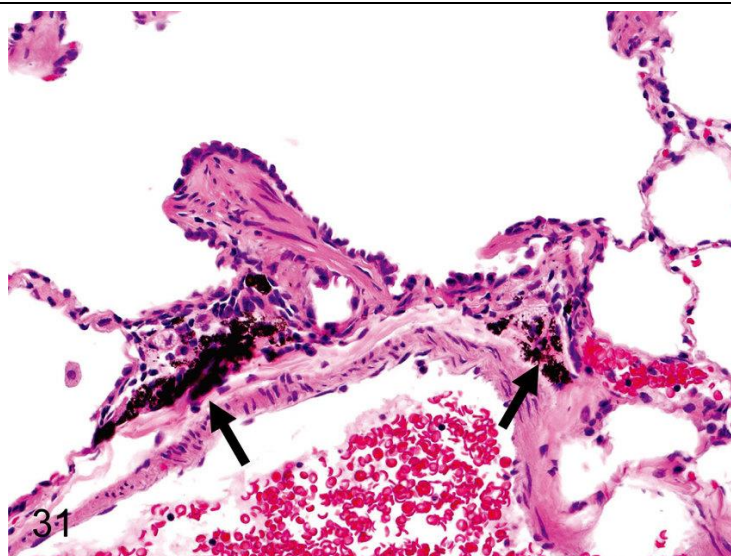
Lung: The fine black deposits of carbon, Inhaled carbon (black) has been phagocytized by macrophages and transported to the peribronchial/peribronchiolar tissue.



The fine black deposits of carbon in in the interstitium around alevoli



Anthracosis lung. There is presence of abundant coarse black carbon pigment in the septal walls and around the bronchiole

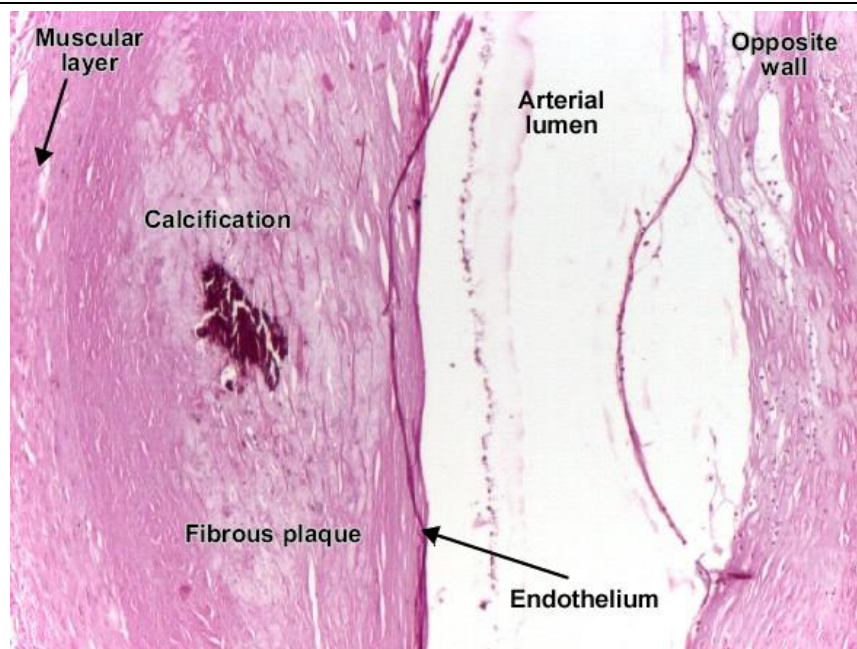


Lung: Anthracotic pigment deposition (anthracosis). Fine black pigments are deposited in the interstitium around the bronchi.

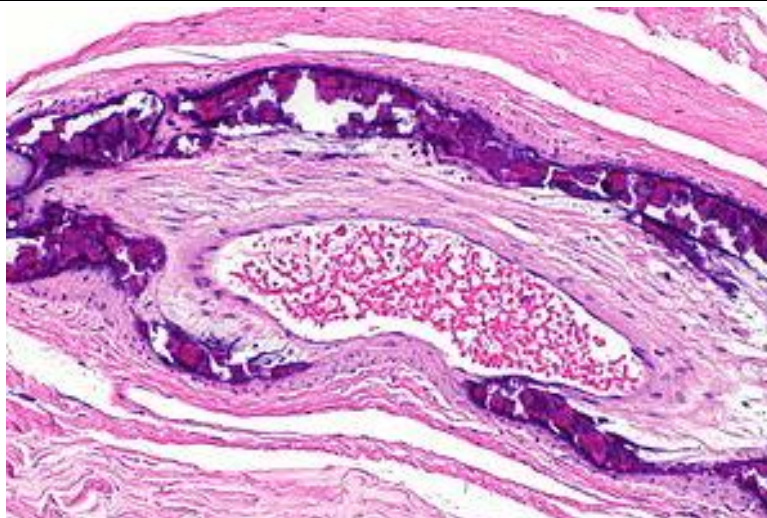
Organ: Blood vessels

Lesion: The histopathological examination shows, calcium salts appear as deep blue (basophilic) granules or masses in intracellular and extracellular space.

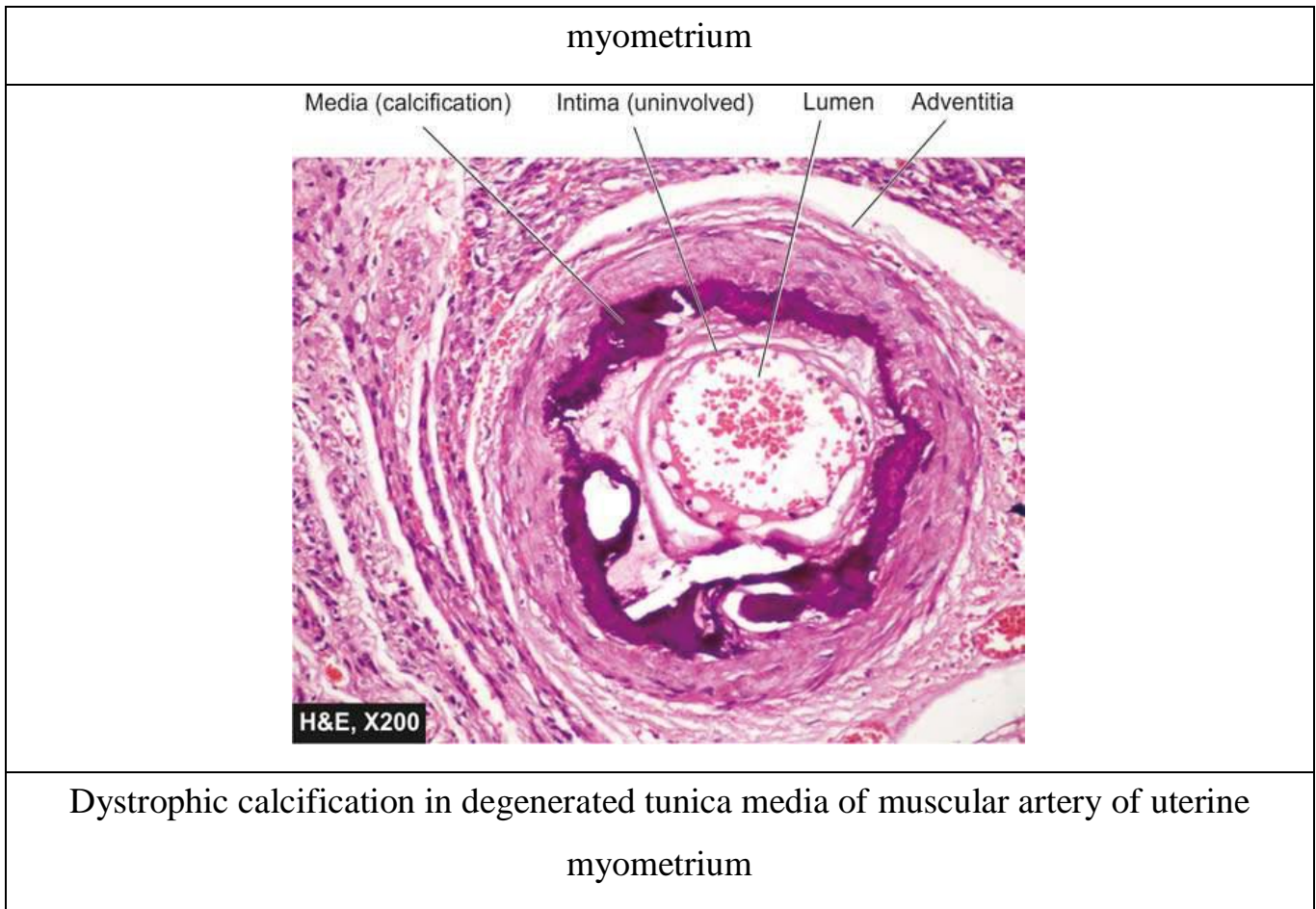
Diagnosis: Dystrophic calcification



The fibrous plaque contains collagen fibers (eosinophilic), precipitates of calcium (hematoxylin)



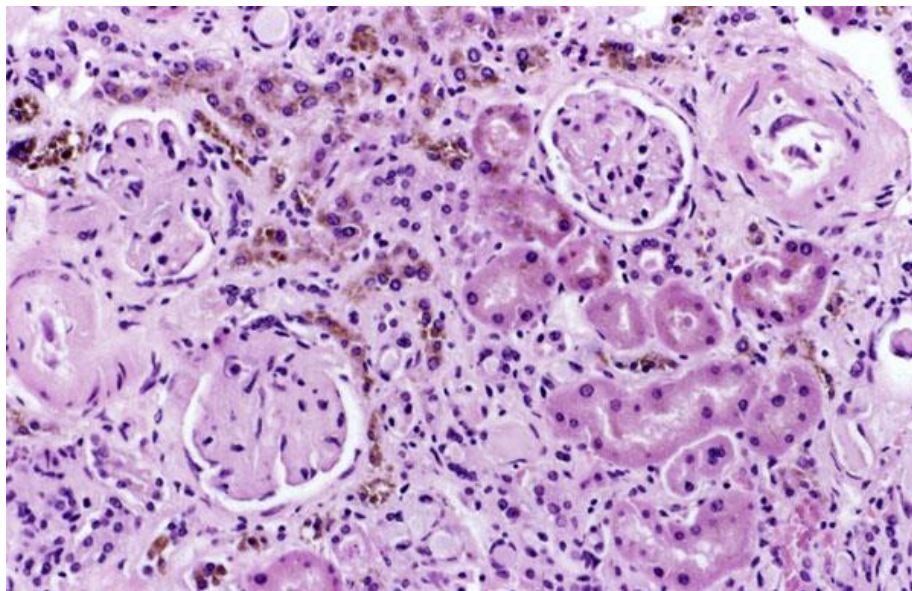
Dystrophic calcification in degenerated tunica media of muscular artery of uterine



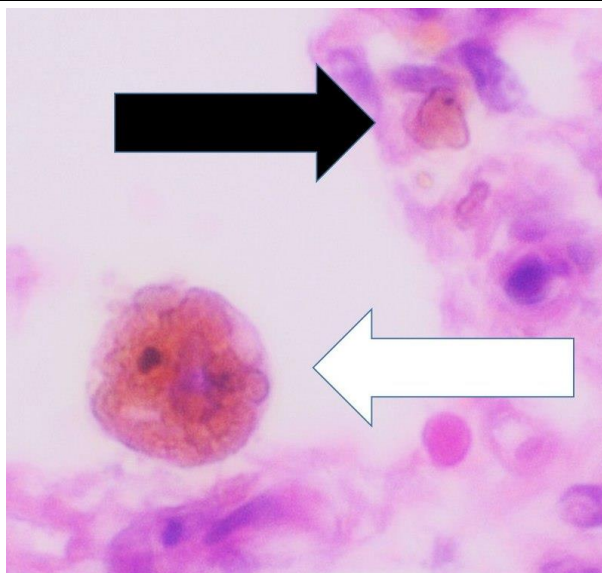
Organ: Spleen

Lesion: The histopathological examination shows, golden-yellow to brown, granular pigment when stain in H&E stain, especially within the mononuclear phagocyte of the bone marrow, spleen and liver where breakdown of senescent red cells takes place, that has accumulated as a result of the breakdown of RBC's and release of the iron in heme. The stain blue of it by staining with Perls' Prussian blue stain (by reaction of ferric Fe^{3+} from hemosiderin and potassium ferrocyanide of stain) and give ferric ferrocyanide.

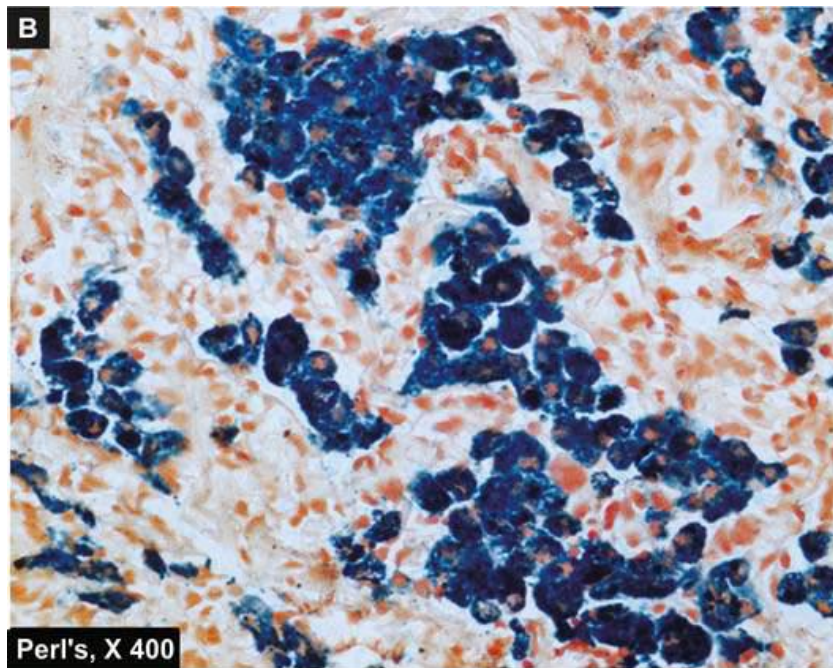
Diagnosis: Hemosiderin



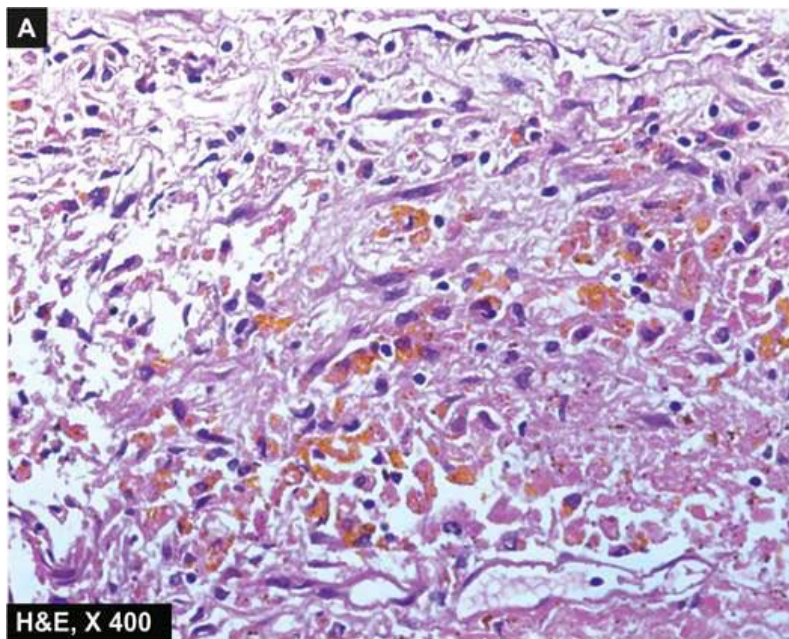
Hemosiderin: kidney viewed under a microscope. The brown areas represent hemosiderin, H & E stain



chronic pulmonary congestion, showing interstitium with hemosiderin deposition (black arrow), edema and collagenous thickening. The alveolus contains a siderophage (white arrow, characterized by coarse brown pigment, which is slightly refractile) H & E stain.



Haemosiderin pigment in the cytoplasm , which stain positive in Perl's stain as Prussian blue granules (B).



Haemosiderin pigment in the cytoplasm. H & E stain shows golden brown granules in the cytoplasm of macrophages