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Histopathologic Findings (Cont.)

There is widespread bronchioloalveolar histiocytic infiltration and patchy histiocytic desquamation. Centriacinar derangement is noted with and without chronic inflammation. Two small arteries are observed that contain organizing/recanalizing thromboemboli. One of the vessels with a thromboembolus (base of upper lobe) is associated with a localized, subpleural area of hemorrhage. Eosinophils are often noted within capillaries and other vascular channels, and are also seen occasionally within interstitial tissues of the lung. In two instances, an air space was observed that contained cells consistent with respiratory lining cells that have undergone squamous metaplasia. Histiocytes often contained birefringent particulates in association with anthracotic pigment. Birefringent particles were absent elsewhere in the lung. Slight chronic inflammation was seen in the bronchial section. The foregoing findings were in part observed in the "K" section of the uninflated lung (H&E stained section). PAS and iron stains of Slides D and K were reviewed.

## **DIAGNOSIS:**

Marked diffuse congestion and patchy hemorrhage of right and left lungs.

Marked respiratory bronchiolitis, histiocytic desquamation, and multifocal chronic interstitial pneumonitis.

Multifocal fibrocollagenous scars with and without congestion and hemorrhage.

Organizing and recanalizing thromboemboli of two small arteries.

Intravascular eosinophilia with occasional interstitial eosinophilic infiltrate.

Suggestive focal desquamation of respiratory lining cells with squamous metaplasia.

## **OPINION**

The above findings reflect a depletion of structural and functional reserves of the lung. Reserve depletion is the result of widespread respiratory bronchiolitis and chronic lung inflammation in association with fibrocollagenous scars and organizing/recanalizing thromboemboli of small arteries.

It should be noted that the above lung injury with reserve loss is not considered to be a direct or contributing cause of death. However, such an individual would be especially susceptible to adverse health effects.

Respectfully submitted,

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