

Quiz #3 Answer:

This patient has asbestosis, a chronic inflammatory condition involving the pulmonary parenchymal tissue. The most common symptom is insidious dyspnea. Coughing is usually not typical unless there is concomitant respiratory tract disease, as in this case, COPD.

Scarring of the bronchioles and alveolar ducts is the result of inhalation of asbestos fibers. There are two types of fibers, amphibole (thin and straight) and serpentine (curvilinear). Amphibole type fibers are able to penetrate deep into the lungs and are responsible for pulmonary disease. Macrophages die off due to the fibers' natural resistance to digestion. Cytokines are released by macrophages which stimulate fibroblasts to deposit connective tissue. This attracts more macrophages and fibroblasts which lay down fibrous tissue. This results in interstitial fibrosis. Plaquing of the parietal pleura is common and patients often present with dry inspiratory crackles, clubbing of the fingers and diffuse fibrotic changes in the lower lung lobes. Asbestosis is considered a malignant pneumoconiosis because of the increased incidence of bronchogenic carcinoma and mesothelioma."

There was no correct answer, however related conditions and differential diagnosis list were received.

Congratulations to:

Thomas Kiley, DC - Congestive heart failure

Christopher Stuart, DC - Pleurisy

Linda Foglia, DC - Bronchogenic CA LUL

Martha Kaeser, DC - Congestive heart failure

Thomas L. Ivey, DC - Mass LUL r/o Bronchogenic CA, hyperaeration bilaterally secondary to atelectasis

Steve Agocs, DC - Emphysema with pleurisy

Ryan May, DC - Emphysema

Robb Hoffman, DC - LLL Pneumonia

-Editor