

PROGRESSIVE MASSIVE FIBROSIS IN SILICOSIS

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PATIENT PRESENTATION

86-year-old male with a past medical history of silicosis, congestive heart failure, end stage renal disease, pulmonary embolism presented with acute on chronic hypoxic respiratory failure.



Figure 1. Initial chest X-ray demonstrated bilateral nodular perihilar consolidations with stippled calcifications superimposed on coarse interstitial changes.

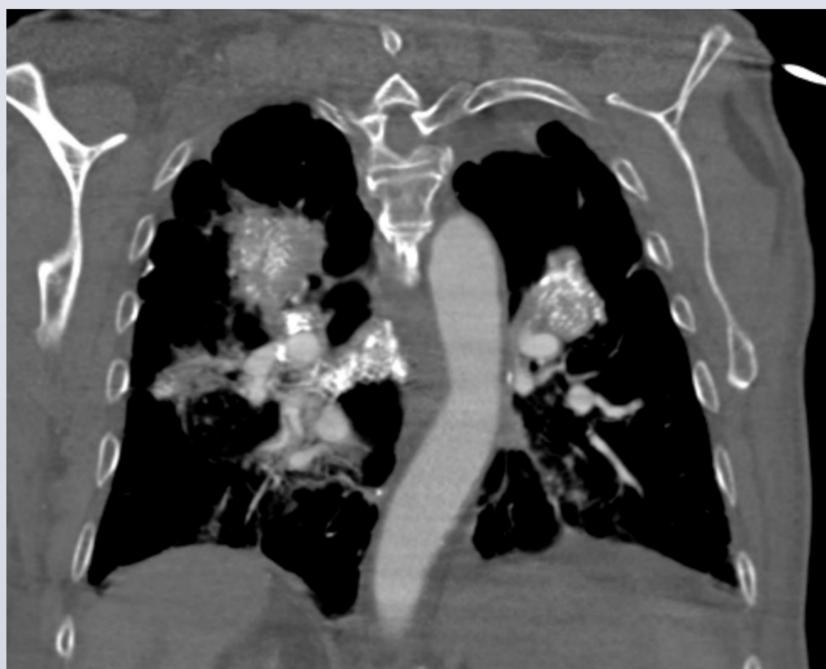


Figure 2. CT Chest demonstrates bilateral upper lobe large conglomerate masses with stippled calcifications and radiating strands.

REFERENCES

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Figure 3. CT Chest demonstrates radiating strands with adjacent fibrotic and emphysematous changes in the posterior right lung (red arrow). There are multiple nodules, largest in the posterior left lung (blue arrow), and calcified nodules (yellow arrow).

DISCUSSION

Silicosis is a type of pneumoconiosis associated with occupational exposure to crystalline silicon dioxide, typically in the setting of mining, sandblasting, stonecutting and tunneling. Silicosis is diagnosed clinically, and thus imaging can be a useful tool. Silicosis may present as acute, chronic simple, and chronic complicated silicosis. Clinical symptoms may vary from asymptomatic to severe cough and sputum production, inspiratory crackles or wheezing.

Complicated chronic silicosis may present as progressive massive fibrosis (PMF). PMF is characterized by large nodules with radiating strands typically in the upper lung fields, due to retraction of the hila with upper lobe fibrotic and emphysematous changes. These lesions are hypermetabolic on PET/CT. PMF can also be seen in coal worker's pneumoconiosis. Differential considerations may include talcosis.

CONTACTS

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