Silicosis

- Egg shell calcification
- Commonly seen in silicosis, but can be seen in sarcoid, tx lymphoma
- Calcified LN "SITS"
  - silicosis
  - Infection (histo, TB)
  - Tx lymphoma
  - sarcoid

Silicosis

- Fibrotic pneumoconiosis caused by the inhalation of fine particles of crystalline silicon dioxide (silica).
- Occupations such as mining, quarrying, and tunneling are associated with silicosis.
- **acute silicosis:** manifests as alveolar silicoproteinosis
- **classic silicosis:** manifests as a chronic interstitial reticulonodular disease

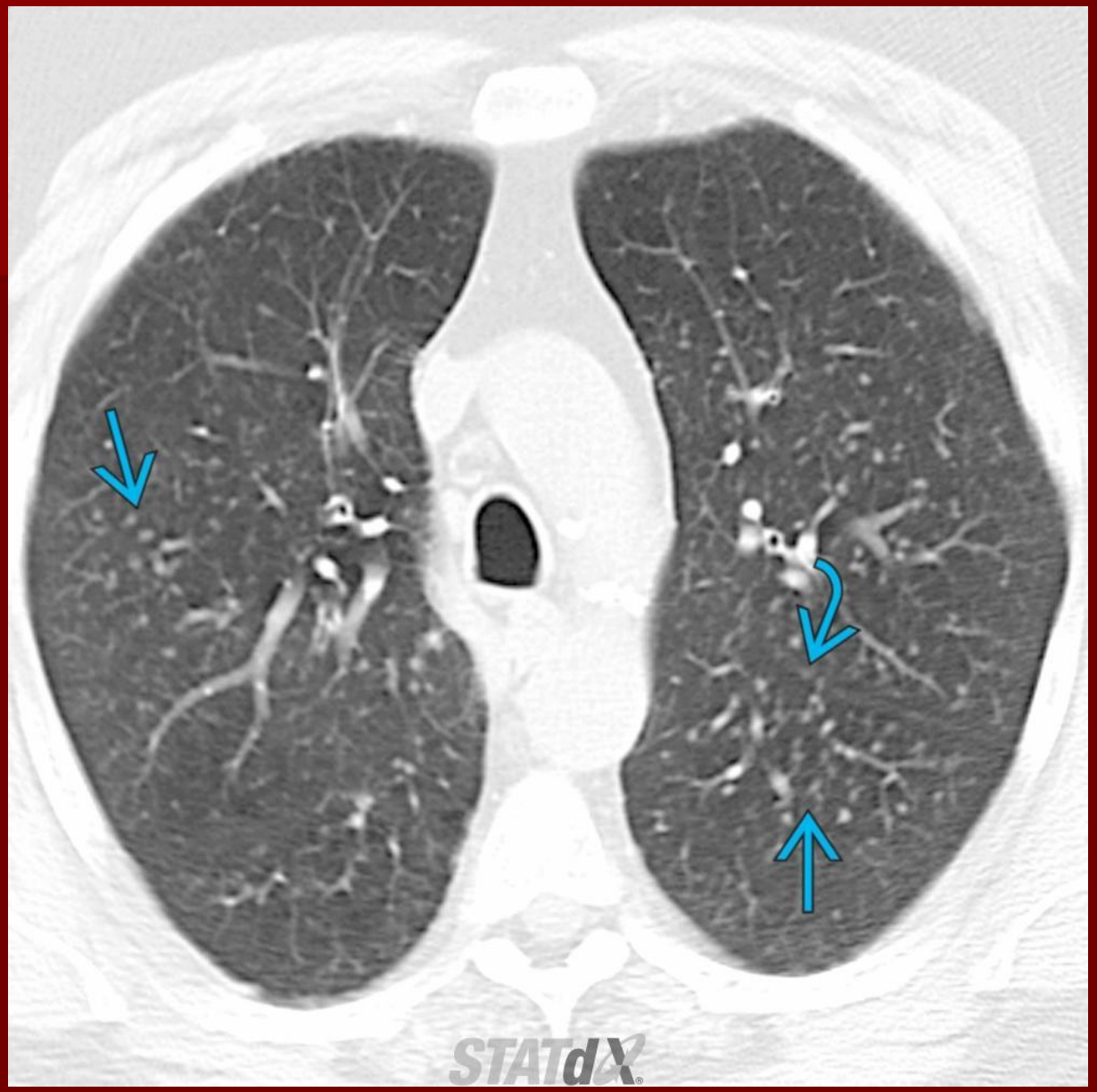
- classic form is much more common than the acute form and can be classified as simple or complicated, according to the radiographic findings
- Simple silicosis: pattern of small and round or irregular opacities
- complicated silicosis: large conglomerate opacities that equate to progressive massive fibrosis

CT

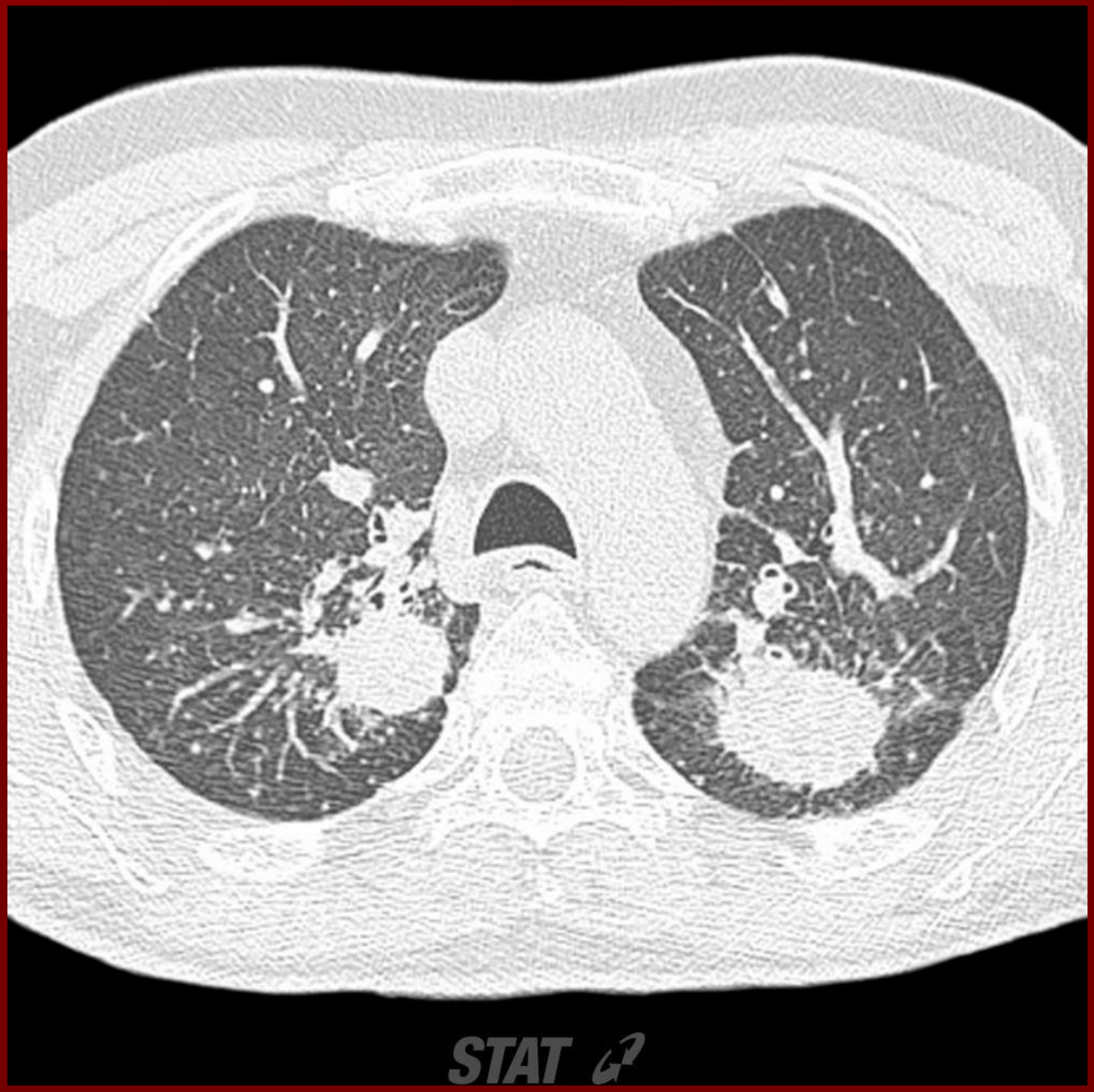
- Perilymphatic micronodules
- Upper lobe masses
- Hilar/mediastinal lymphadenopathy, may calcify (egg-shell morphology is common)

Clinical issues

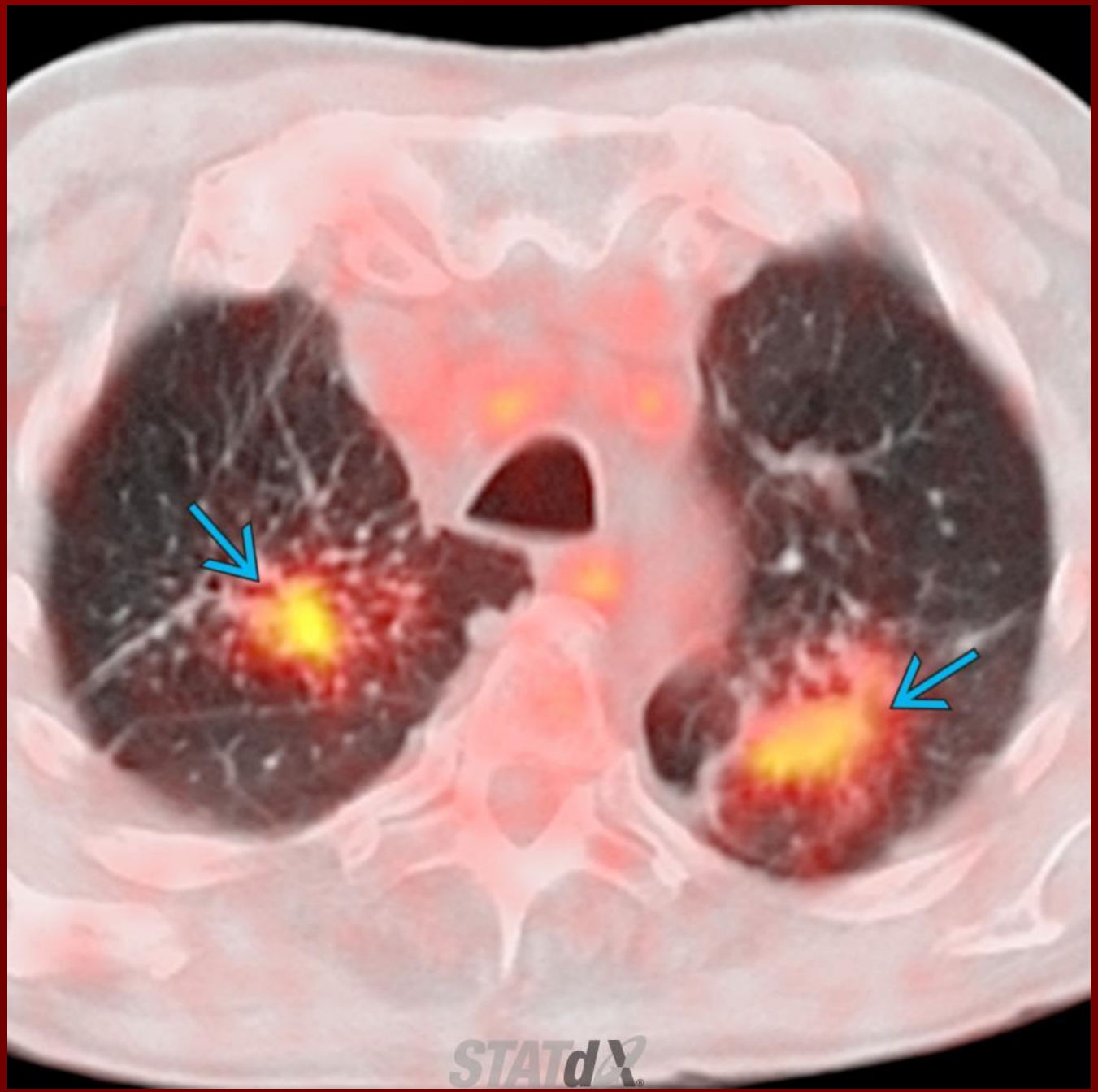
- Occupations: Sandblasting, quarrying, mining, glassblowing, pottery
- Simple silicosis: Asymptomatic
- Complicated silicosis (PMF)
  - Symptomatic
  - Death from respiratory failure, pneumothorax, tuberculosis



Axial NECT of the same patient shows diffuse predominantly peribronchovascular (cyan solid arrow) micronodules and some nodules disposed along the interlobar fissures (cyan curved arrow). This combination of peribronchovascular and subpleural nodules is characterized as perilymphatic. Sarcoidosis and lymphangitic carcinomatosis exhibit a similar distribution.



Axial HRCT of the same patient shows bilateral upper lobe predominant soft tissue masses surrounded by peribronchovascular micronodules. The masses result from coalescence of peribronchovascular micronodules. These masses may cavitate and exhibit FDG uptake, thus mimicking malignancy.



Axial FDG PET/CT of a patient with complicated silicosis (i.e., progressive massive fibrosis) shows FDG-avid upper lobe predominant masses (cyan solid arrow) amid a background of emphysema and perilymphatic micronodules.