

Picture quiz 1



Image 1 : Chest radiograph.

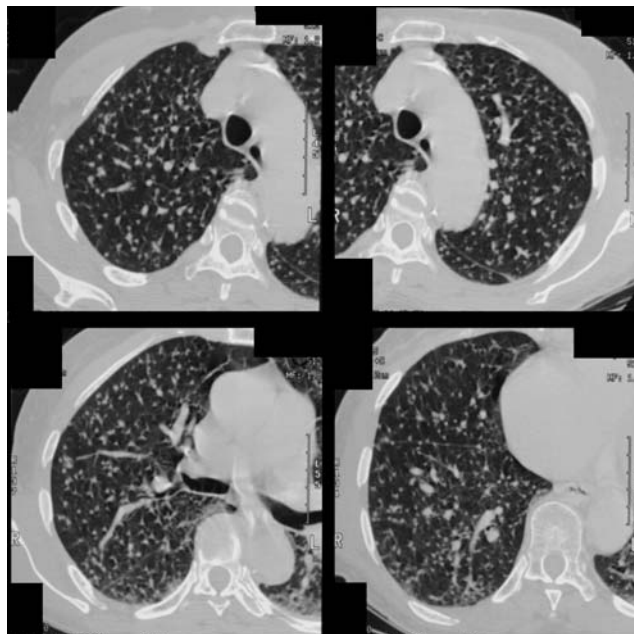


Image 2 : High Resolution CT scan of chest.

Question

A 35-year old man after kidney transplantation with a 2-week history of progressive dyspnoea and low grade fever. What are your observations? What is the diagnosis?

Answer

Diagnosis: Miliary tuberculosis

Description: Image 1. The chest radiograph shows diffuse small nodular opacities, without lymphadenopathy or pleural effusion. The nodules are 2–3 mm in size with distinct margins consistent with a miliary pattern.

Image 2. High resolution CT confirms a bilateral fine nodular interstitial pattern. The sharply margined nodules measuring less than 5 mm are in random distribution, involving lymphatics in the interlobular septa and bronchovascular sheath, as well as intralobular structures including alveolar walls.

Differential diagnosis: Hematogenously disseminated infection (tuberculosis or fungus), metastatic renal or thyroid malignancies, sarcoidosis.

Discussion: Haematogenous dissemination of *Mycobacterium tuberculosis* occurs when a pulmonary focus releases bacilli into adjacent vessels or lymphatics, complicating primary or secondary infection. The lung is most commonly involved. In about one-third of cases, associated findings may support the diagnosis of miliary tuberculosis, including areas of consolidation, cavitation or lymphadenopathy.

Positive radiographic findings develop in 3 to 6 weeks following dissemination, so that initial radiographs at the onset of symptoms may be normal.

AL Chang, Consultant radiologist; e-mail: <ailee32@yahoo.co.uk>

Information for Authors

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