

Images In...

Reversed halo sign in cryptogenic organising pneumonia

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DESCRIPTION

A 40-year-old woman was admitted to our respiratory ward with a short history of shortness of breath, non-productive cough and fever. She also complained of pleuritic chest pain on the right and some night sweats. Her exercise tolerance had reduced from 200 m on the flat to about 20 m. Her medical history included ischaemic heart disease, myocardial infarction, hypothyroidism, fibromyalgia and migraines. She was not immunosuppressed. Six months ago she was also admitted to intensive care with pneumonia. She was an ex-smoker with a 20 pack/year history. There were no risk factors for HIV. On examination she was found to be pale, clammy and breathless. Her oxygen saturations were being maintained at 99% on 15l non-rebreather mask. On auscultation there was decreased air entry and crepitations at the right mid-zone. Blood tests revealed a normocytic anaemia with raised white cell count at 15 000 and C reactive protein greater than 160. Her chest x-ray showed right middle zone consolidation. It was thought this was community acquired pneumonia and, therefore, she was started on intravenous antibiotics. Due to the pleuritic chest pain a CT scan was ordered to rule out a pulmonary embolus. This showed unremarkable mediastinal lymphadenopathy and right middle lobe consolidation.

Three weeks later she showed no sign of improvement. Other than antibiotics, the only other treatment she had was the commencement of her usual diuretic to treat heart failure. A further CT scan was ordered and a bronchoscopy was performed. The CT scan showed several new areas of consolidation with a reversed halo sign having appeared in both lungs over this period of time (figure 1). This has been classically described in cryptogenic organising pneumonia (COP); however, it has also been described in tuberculosis, sarcoidosis and vasculitis. Bronchoscopy washings were negative for acid and alkali fast bacilli and there was no growth on culture. Antineutrophil cytoplasmic antibodies were negative. An open lung biopsy was considered in order to obtain a definitive diagnosis, but surgery was judged to be a significant risk in view of the degree of hypoxia. A presumptive diagnosis of COP was made and corticosteroids started (40 mg prednisolone). Her symptoms resolved over a matter of days. A repeat chest x-ray 2 weeks later showed no consolidation or pleural effusion.

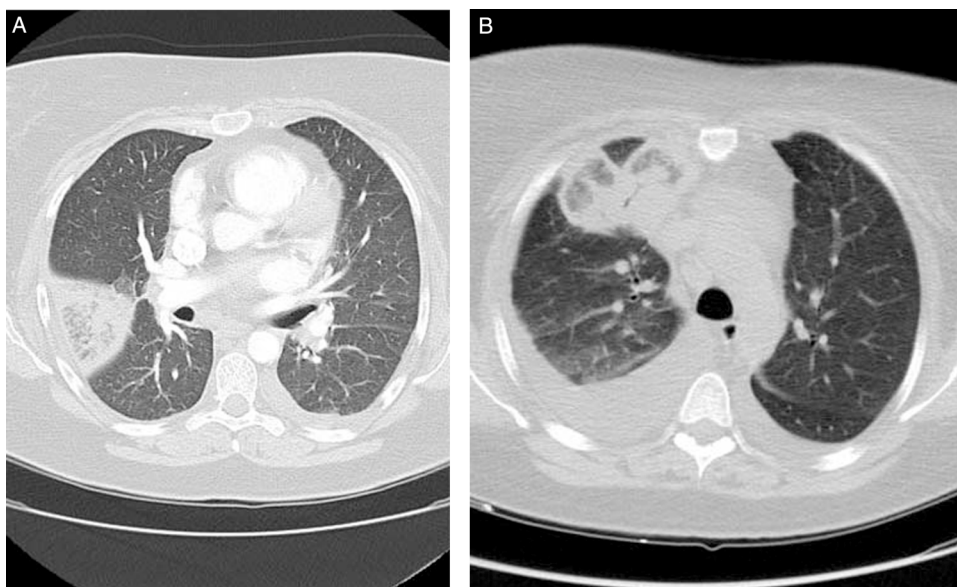
Competing interests None.**Patient consent** Obtained.

Figure 1 Two examples of reversed halo sign in cryptogenic organising pneumonia.

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