A 51 year old man presented with a 1 year history of fatigue and night sweats, cough with clear sputum, central chest discomfort, and mild exertional dyspnoea. A detailed exposure history was negative. Laboratory investigations including tuberculin skin test, white cell count, ESR, C-reactive protein, urea, creatinine and electrolytes, protein electrophoresis, rheumatoid factor, antinuclear antibody, calcium, alkaline phosphatase and liver function tests were all normal. Urinalysis and 24 hour urine calcium excretion were normal. Echocardiography was normal. Detailed pulmonary function tests and arterial blood gases were normal except for an isolated reduction in the transfer factor (73% predicted).

The chest radiograph showed a reticulonodular pattern involving mainly the lower lobes. A high resolution chest CT scan showed a fine nodular pattern with foci of calcification (figs 1A and B). Transbronchial biopsy specimens were non-diagnostic. Thoracoscopic open lung biopsy was performed. Light microscopic examination revealed multiple foci of bone in a branching pattern randomly located within the alveolar airspaces. Bone marrow was identified within some fragments (fig 2). There was associated mild subpleural and focal small nodular interstitial scarring but no honeycombing or other features to suggest pulmonary fibrosis. There was no evidence of venous congestion or iron deposition. Congo red stains were negative and electron microscopy revealed no evidence of amyloid. There was no evidence of granulomas or malignancy.

The presence of pulmonary calcification is often not apparent on the radiograph but can usually be seen on high resolution CT scanning.

**Learning points**

- Diffuse pulmonary ossification usually occurs in the context of a pre-existing pulmonary, cardiac or metabolic disorder. Idiopathic diffuse pulmonary ossification is a very rare disorder that usually occurs in men aged 40–60 years. Patients are usually asymptomatic but mild symptoms, restrictive pulmonary physiology, and impaired transfer factor have been described.
- The presence of pulmonary calcification is often not apparent on the radiograph but can usually be seen on high resolution CT scanning.

Correspondence to: Dr C F Ryan, UBC Respiratory Clinic, 2775 Heather Street, Vancouver, BC, V5Z 3J5, Canada; fryan@interchange.ubc.ca

**REFERENCES**


Idiopathic diffuse pulmonary ossification

C F Ryan, J D Flint and N L Müller

Thorax 2004 59: 1004
doi: 10.1136/thx.2004.031682

Updated information and services can be found at:
http://thorax.bmj.com/content/59/11/1004

These include:

References
This article cites 2 articles, 0 of which you can access for free at:
http://thorax.bmj.com/content/59/11/1004#BIBL

Email alerting service
Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

Topic Collections
Articles on similar topics can be found in the following collections
Thorax Images in Thorax (149)

Notes

To request permissions go to:
http://group.bmj.com/group/rights-licensing/permissions

To order reprints go to:
http://journals.bmj.com/cgi/reprintform

To subscribe to BMJ go to:
http://group.bmj.com/subscribe/