

Eggshell calcification

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DESCRIPTION

A 55-year-old man from Khambhat, India, who was admitted to undergo a planned repair of a direct inguinal hernia, was found to have bilateral hilar lymphadenopathy with calcification in a peculiar circumferential pattern identified as eggshell calcification on chest X-ray (figure 1) as part of a routine preoperative evaluation. The patient denied any symptoms of cough, dyspnoea, chest pain, night sweats or weight loss. Moreover, there was no contact history for tuberculosis. On further probing he admitted that he had in fact worked as a gemstone cutter for more than 20 years. A complete physical examination and laboratory work up (including serum ACE levels and an antinuclear antibody profile) were normal apart from the hernia. Pulmonary function tests were normal and a high resolution of the chest revealed, apart from the calcified lymph nodes, subtle reticulonodular opacities in the upper lobes. Based on his significant occupational history a diagnosis of silicosis was made and the patient was discharged on close follow-up after an uneventful surgery.



Figure 1 Plain X-ray posteroanterior view showing bilateral hilar adenopathy with eggshell calcification.

Silicosis refers to a spectrum of respiratory diseases caused by inhalation of silica dust, usually as an occupational hazard.¹ The clinical presentation varies from an insidious chronic course, radiographic changes being seen sometimes up to a decade after cessation of exposure, to a more rapid, accelerated course, which is fortunately rare. Eggshell calcification is most commonly seen in occupational diseases, like silicosis and coal-worker's pneumoconiosis as well as sarcoidosis but rarely in postirradiated Hodgkin's disease, blastomycosis, scleroderma, amyloid and histoplasmosis.² Increased awareness of the toll on the health and lives of gem workers especially in regions like Khambhat in India is necessary to institute timely prevention and screening precautions.³

Learning points

- ▶ Silicosis may present as an incidental radiological finding several years after exposure to silica dust.
- ▶ Egg shell calcification is a striking radiological finding that in conjunction with a conducive occupational history may lead to the appropriate diagnosis.
- ▶ Increased awareness and institution of appropriate preventive measures which are crucial to reducing incidence and morbidity in a susceptible population.

Contributors All authors have contributed to writing of manuscript as well as caring for the patient.

Competing interests None.

Patient consent Obtained.

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