

Padrão Eggshell Calcification: Um Achado Incidental Eggshell Calcification Pattern: An Incidental Finding

Diana Rocha¹ , Rute Brás Cruz¹ , Jorge Machado², Marta Pereira³

Palavras-chave: Calcinose/diagnóstico por imagem; Doenças Linfáticas Silicose/diagnóstico por imagem .

Keywords: Calcinosis/diagnostic imaging; Lymphatic Diseases; Silicosis / diagnostic imaging.

The patient denied history of fever, night sweats or weight loss and there was no past diagnosis of tuberculosis. A complete physical examination was normal apart from the trauma injuries. Based on his significant occupational history and chest imaging, a diagnosis of silicosis was made. The patient was later referred to Pneumology for further evaluation and follow-up.

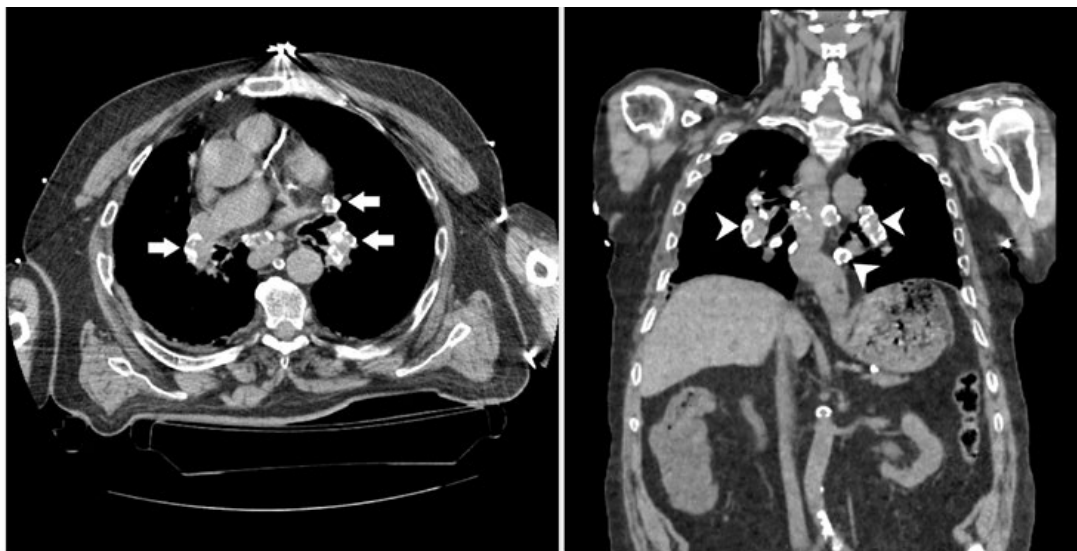


Figure 1: Computed tomogram of the chest (mediastinal window) showing the mediastinal and bilateral calcified hilar lymph nodes. The pattern of calcification is the classical eggshell calcification, a calcified rim around the periphery of the lymph nodes, shown by white arrows (left - axial view; right - coronal view).

An 82-year-old man was admitted with polytrauma to the emergency room from a road traffic accident. As part of the systematic evaluation, he was found to have bilateral hilar lymphadenopathy with calcification in circumferential pattern identified as eggshell calcification on computed tomography (CT), as an isolated finding (Fig. 1), also seen in chest radiograph (Fig. 2).

On further evaluation, he admitted having complaints of breathlessness on exertion and cough with minimal sputum for several years along with a history of cigarette smoking. Moreover, he had worked as a miner for 20 years before the age of 40.

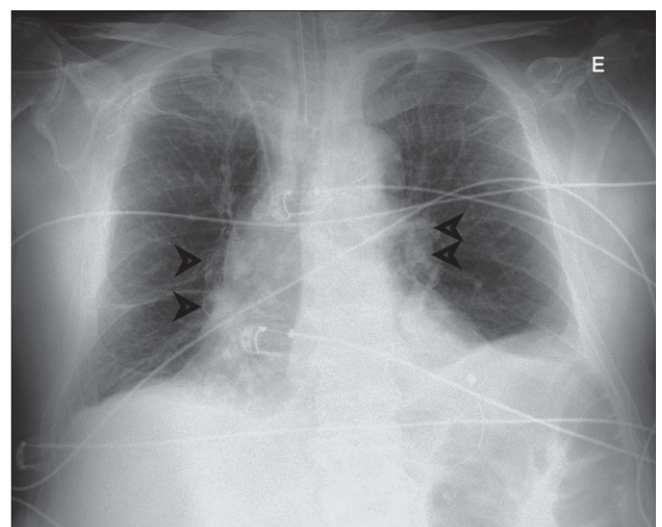


Figure 2: Plain X-ray posteroanterior view showing bilateral hilar adenopathy with eggshell calcification (black arrows).

¹Serviço de Medicina Interna, Unidade Local de Saúde de Matosinhos, Hospital Pedro Hispano, Matosinhos, Portugal

²Serviço de Radiologia, Unidade Local de Saúde de Matosinhos, Hospital Pedro Hispano, Matosinhos, Portugal

³Serviço de Medicina Intensiva, Unidade Local de Saúde de Matosinhos, Hospital Pedro Hispano, Matosinhos, Portugal

<https://doi.org/10.60591/crspmi.37>

Silicosis is a fibrotic pneumoconiosis caused by the inhalation of fine particles of silica. In simple silicosis, the most characteristic feature at CT is the presence of multiple small nodules. Enlargement of hilar and mediastinal lymph nodes may precede the appearance of parenchymal nodular lesions and its calcification is common and typically occurs at the periphery of the node. The resulting eggshell calcification pattern is highly suggestive of silicosis.^{1,2} This pattern can also be observed in worker's pneumoconiosis and occasionally in sarcoidosis, blastomycosis or histoplasmosis.³

In conclusion, silicosis may present as an incidental radiological finding several years after exposure to silica dust. The eggshell calcification presents as a classic radiological finding. ■

Declaração de Contribuição

DR, RBC, JM, MP – Elaboração, análise e interpretação de dados e revisão final do artigo.

Todos os autores aprovaram a versão final a ser submetida.

Contributorship Statement

DR, RBC, JM, MP - Preparation, analysis and interpretation of data and final revision of the article.

All authors approved the final draft.

Responsabilidades Éticas

Conflitos de Interesse: Os autores declaram a inexistência de conflitos de interesse na realização do presente trabalho.

Fontes de Financiamento: Não existiram fontes externas de financiamento para a realização deste artigo.

Confidencialidade dos Dados: Os autores declaram ter seguido os protocolos da sua instituição acerca da publicação dos dados de doentes

Consentimento: Consentimento do doente para publicação obtido. Proveniência e Revisão por Pares: Não comissionado; revisão externa por pares.

Ethical Disclosures

Conflicts of interest: The authors have no conflicts of interest to declare.

Financing Support: This work has not received any contribution, grant or scholarship

Confidentiality of Data: The authors declare that they have followed the protocols of their work center on the publication of data from patients.

Patient Consent: Consent for publication was obtained. Provenance and

Peer Review: Not commissioned; externally peer reviewed.

© Autor (es) (ou seu (s) empregador (es)) e SPMI Case Reports 2024. Reutilização permitida de acordo com CC BY-NC 4.0. Nenhuma reutilização comercial.

© Author(s) (or their employer(s)) and SPMI Case Reports 2024. Re-use permitted under CC BY-NC 4.0. No commercial re-use.

Correspondence / Correspondência:

Diana Rocha - dianaluisarocha@gmail.com

Serviço de Medicina Interna, Unidade Local de Saúde de Matosinhos, Hospital Pedro Hispano, Matosinhos, Portugal
Rua de Dr. Eduardo Torres, 4464-513 Sra. da Hora

Recebido / Received: 2023/04/29

Aceite / Accepted: 2023/06/20

Publicado online / Published online: 2024/06/17

REFERENCES

1. Chong, S, Lee K, Chung M, Han J, Kwon O, Kimet T. Pneumoconiosis: Comparison of Imaging and Pathologic Findings. *RadioGraphics*. 2006; 26:59–77. doi: 10.1148/rg.261055070
2. Madan M, Mittal R, Gupta P, Chhabra SK. Eggshell calcification. *Lung India*. 2017;34:200-1. doi: 10.4103/0970-2113.201302.
3. Patell R, Dosi R, Joshi H, Shah P. Eggshell calcification. *BMJ Case Rep*. 2013 :2013:bcr2013200362. doi:10.1136/bcr-2013- 200362