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Phtisiology

An Atypical Cause of Dyspnoea

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Abstract **Case Report**

The bronchial tree Calcifications are a rare cause of dyspnoea and may be related to osteochondroplastic tracheobronchopathy, lytic bone lesions or hyperparathyroidism. We report a case of a 65-year-old woman operated 10 years ago for primary hyperparathyroidism who consulted for dyspnoea evolving for 3 years, whose radiological examinations showed bronchial calcifications.

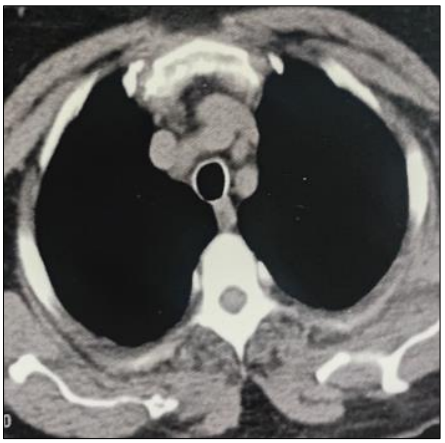
Keywords: Bronchial calcifications, Dyspnoea, Hyperparathyroidism, Metastatic calcification, Hypercalcaemia.

INTRODUCTION

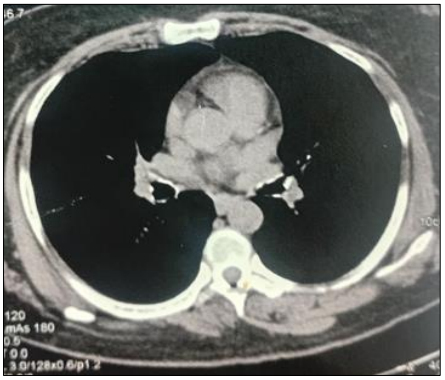
Metastatic calcifications (also known as ectopic calcifications) refer to deposits of calcium salts in healthy tissue. A distinction must be made with dystrophic calcifications, which involve previously damaged tissues. Metastatic calcifications are subdivided into visceral and non-visceral calcifications, the latter affecting connective tissue as well as vessels. Although visceral calcifications can sporadically affect numerous sites, the organ most frequently involved in visceral metastatic calcifications is the lung [1].

PATIENT AND OBSERVATION

A 65-year-old patient with a history of primary hyperparahyroidism, operated 10 years ago and currently on calcium supplementation, consulted for inspiratory dyspnoea with no other associated respiratory signs. The standard chest X-ray showed thickening of the bronchial walls**,** and the chest CT scan showed calcification of the entire bronchial tree, the biological testing showed hypercalcaemia. Fibroscopy showed a normal macroscopic appearance of the bronchi. Plethysmography showed no abnormalities. Treatment consisted of administering bronchodilators to relieve dyspnoea and adjusting the dosage of vitamin and calcium therapy.



Chest CT scan with tracheal calcifications



Chest CT scan with calcification of the distal bronchi

DISCUSSION

The most common causes of metastatic pulmonary calcifications are hyperparathyroidism, lytic bone lesions of neoplastic origin, such as multiple myeloma, and kidney failure [2]. Our patient has two risk factors, primary hyperparathyroidism and vitamin-calcium treatment.

Most patients with metastatic pulmonary calcifications are asymptomatic and have normal pulmonary function tests. For some patients a restrictive pulmonary syndrome, diffusion disorders, hypoxaemia and respiratory failure may be observed [2].

The specific clinical management of patients with metastatic pulmonary calcifications is not well known. Every effort must therefore be made to eliminate predisposing factors, in particular by correcting blood calcaemia, phosphocalcic product and renal function [2].

CONCLUSION

Metastatic pulmonary calcifications are probably under-diagnosed because they are rarely symptomatic. Their pathogenesis is still incompletely understood, and implicates phosphocalcic balance or impaired renal function.

REFERENCES

1. A.O. Fayemi *et al.* Pulmonary calcification in a patient with multiple myeloma Chest (1973)
2. Pulmonary metastatic calcification Author links open overlay panel M. Pasquier, M.-D. Schaller, M. Abdou, P. Eckert: Received 1 April 2011, Accepted 25 January 2012, Available online 31 May 2012.