World Journal of Advanced Research and Reviews
eISSN: 2581-9615 CODEN (USA): WJARAI
Cross Ref DOI: 10.30574/wjarr
Journal homepage: https://wjarr.com/

(CASE REPORT)

Check for updates

PULMONARY CHONDROMA: A CASE REPORT

El aini Sarah [1, 2, *], El aamadi Wafae [1, 2], Bouchikh Mohamed [1, 2] and Achir Abdellah [1, 2]

[1] Department of thoracic surgery, Ibn Sina Hospital, Rabat, Morocco.
[2] Faculty of Medicine and pharmacy, Mohammed V university of Rabat, Morocco.
* Corresponding Author

World Journal of Advanced Research and Reviews, 2026, 31(03), 713–714

Publication history: Received on 02 August 2026; revised on 09 September 2026; accepted on 11 September 2026

Article DOI: https://doi.org/10.30574/wjarr.2026.31.3.2357

ABSTRACT

Chondroma, a benign tumor arising from chondrocytes, typically manifests in long bones, with rare occurrences in lung tissue. Here, we present the case of a 52-year-old woman with a lung mass who underwent surgical wedge resection, revealing lung chondroma upon histopathological examination.

Keywords: Pulmonary chondroma; Carney triad; Benign lung tumor; Cartilaginous tumor; Pulmonary nodule; Surgical resection.

1 INTRODUCTION

Chondroma, a benign tumor of cartilaginous origin, typically manifests in the short tubular bones of the hands and feet. Instances of extraskeletal chondroma are uncommon, with pulmonary chondroma being exceedingly rare.

Pulmonary chondroma commonly manifests as multiple lesions, predominantly in females, and frequently associates with Carney syndrome.

2 CASE REPORT

A 52-year-old female patient, a non-smoker with no prior medical history, presented with a dry cough persisting for 2 months. Physical examination and laboratory tests revealed no abnormalities. However, a chest X-ray revealed a well-defined oval opacity measuring 3 cm in the long axis, located in the right upper lobe. Subsequent chest CT confirmed this finding, showing a 38mm mass in the upper right lobe with lobulated contours and small areas of fatty density that moderately enhanced following contrast injection. No mediastinal involvement was observed. Bronchoscopy did not reveal any abnormalities, and biopsy of the bronchial mucosa showed normal respiratory tissue. Additionally, three sputum smears for acid-fast bacilli, performed systematically, were negative. The possibility of pulmonary hydatid disease was considered, but the hydatid serology test conducted returned negative results. Hence the decision for wedge resection of the mass via postero-lateral thoracotomy. Postoperative recoveries were simple, gross pathology of the resected specimen showed a 3cm whitish nodule with firm hemorrhagic alterations and evidence of capsular rupture.

Histological analysis revealed the existence of loose mesenchymal tissue containing mature cartilaginous lobules alongside mature adipose tissue and respiratory-type epithelial structures, all without any signs of cytonuclear atypia; consistent with the diagnosis of pulmonary chondroma.

The patient declined an evaluation for Carney's triad. Nevertheless, given the absence of clinical indicators and the absence of mediastinal involvement on CT scan, the possibility of a paraganglioma at this level was ruled out. Presently, the patient remains asymptomatic, with a two-year follow-up.

3 DISCUSSION

Chondroma is a benign tumor, originating in chondrocytes. It is common in long bone, but rarely occurs in the lung. Only 0.04% of lung neoplasms were identified to be pulmonary chondroma (1). It is common in adult females of 40–50-years-old and neonatal cases were occasionally reported (2).

The clinicopathological features of pulmonary chondroma has been rarely reported. Pulmonary chondroma commonly presents as one of the clinical manifestations of Carney's syndrome. In a study that included gastrointestinal stromal tumor, pulmonary chondroma, extra-adrenal paraganglioma (3). If at least two out of three clinical features are identified, a diagnosis of Carney's triad may be established.

Differential diagnoses of pulmonary chondroma are essentially hamartoma (particularly cartilage hamartoma); primary or secondary chondrosarcoma; tuberculoma and peripheral lung cancer. Therefore, histological confirmation is crucial for appropriate management.

From a therapeutic perspective, solitary lesions, whether symptomatic or not, can be surgically removed, even if solely for diagnostic purposes. In cases of multiple lesions associated with Carney's triad, a more conservative approach is taken. However, it's essential not to overlook the possibility of another lesion, especially a metastasis from a stromal tumor. Extended monitoring is always warranted to detect other components of Carney's syndrome, given the possibility of a latency period ranging from 1 to 26 years (4).

4 CONCLUSION

Pulmonary chondroma is a rare benign lung tumor with an unknown origin. Diagnosis can be challenging as it may resemble tuberculoma, hamartoma (especially cartilage hamartoma), or peripheral lung cancer. Due to the potential for malignant transformation, complete surgical removal is the optimal treatment approach. Additionally, pulmonary chondroma could potentially signify an initial manifestation of Carney's triad. Hence, upon diagnosing pulmonary chondroma, further evaluation is necessary to rule out Carney's triad.

STATEMENTS ON COMPLIANCE WITH ETHICAL STANDARDS

Acknowledgments

The authors would like to acknowledge and sincerely thank all the co-authors for their valuable contributions and active participation in this work.

Disclosure of conflict of interest

The authors declare no conflicts of interest regarding this manuscript.

REFERENCES

[1] Bateson EM. Histogenesis of intrapulmonary and endobronchial hamartomas and chondromas (cartilage-containing tumours): A hypothesis. J Pathol. 1970;101:77–83.

[2] Hoekstra MO, Bertus PM, Nikkels PG, Kimpen JL. Multiple pulmonary chondromata. A rare cause of neonatal respiratory distress. Chest.

[3] Carney JA, Sheps SG, Go VL, Gordon H. The triad of gastric leiomyosarcoma, functioning extra-adrenal paraganglioma and pulmonary chondroma. N Engl J Med. 1977;296:1517–1518.

[4] Carney JA. Gastric stromal sarcoma, pulmonary chondroma, and extra-adrenal paraganglioma (Carney Triad): natural history, adrenocortical component, and possible familial occurrence. Mayo Clin Proc. 1999 Jun;74(6):543-52. doi: 10.4065/74.6.543. PMID: 10377927.