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Case Report

Tracheal hamartochondroma

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A 60-year-old patient with a smoking history of 40 pack-years presented with progressive shortness of breath at exertion since 5 months without benefit of a treatment for chronic obstructive pulmonary disease (COPD). He had mild cough but no chest pain, no stridor, no fever and no complaints of hemoptysis. Physical examination was normal. Computed tomography of the chest revealed a hypodense round lesion on the posterior wall of the trachea without clear retrotracheal limit (Fig. 1A and B—arrows). Rigid bronchoscopy using general anesthesia showed a pale pink tumor that involving 4/5 of the tracheal at 7 cm of cricoid cartilage with infiltration of the posterior surrounding tissue (Fig. 1C). After laser-guided devascularization, a mechanical resection of the entire endotracheal lesion using the tip of the rigid bronchoscope was performed. On histopathological examination, the lesion was consistent with a hamartochondroma. A flexible bronchoscopy carried out 6 weeks later showed no intraluminal lesion (Fig. 1E) and post-procedural MRI revealed mainly retrotracheal residual contrast enhancement, measured at $12 \times 7 \times 19$ mm (Fig. 1D—arrow). Patient's follow-up was decided taking into account a high recurrent rate of such lesion.

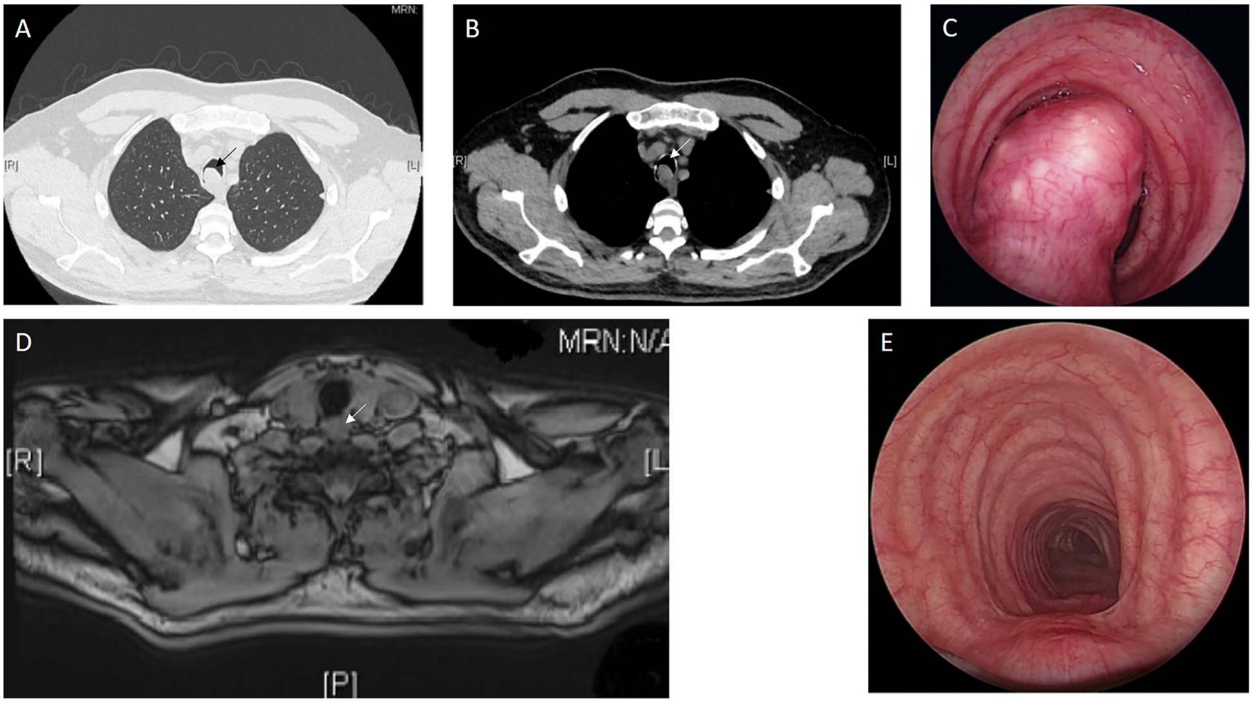

Figure 1. (**A**, **B**) Computed tomography of the chest revealed a hypodense round lesion on the posterior wall of the trachea without clear retrotracheal limit (arrows). (**C**) Endoscopic view of the tumor involving the trachea with infiltration of the posterior surrounding tissue. (**D**) Post-procedural MRI with retrotracheal residual contrast enhancement (arrow). (**E**) Post-procedural endoscopic tracheal macroscopic aspect 6 weeks after tumor resection.

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DISCUSSION

Pulmonary hamartochondroma is a frequent benign tumor of the lung but its tracheobronchial endoluminal presentation is only found in 1.4% of the cases [1]. It affects mainly adults between 60 and 70 years old [2]. Histopathologically, the tumor combines the criteria of two distinct benign tumors: hamartoma, which is mixt of different tissues composing a normal bronchus, and chondroma, which is a tumor of cartilaginous cells [2]. In the largest series [3], the sex ratio was 6.1 (37 men, 6 women) and 86% of patients were symptomatic with recurrent respiratory infections, central airway obstruction (mimicking COPD) [4] and hemoptysis (30%). Bronchoscopy generally provides the diagnosis thanks to biopsies but is also, in case of endoluminal presentation, the only treatment. If endoscopic resection is not complete, surgery can be proposed with the aim to be as conservative as possible. Local recurrence is generally low. In the series of 43 patients published by Casío *et al.*, a recurrence occurred in four patients. This should deserve an endoscopic follow-up even though malignant transformation has not yet been described for this type of tumor unlike pure chondroma, which has the potential to evolve to chondrosarcoma [5].

CONCLUSION

With this clinical case, we aimed to show that debulking of endotracheal hamartochondroma, using interventional bronchoscopic techniques, is feasible, effective and safe, and to demonstrate the diagnostic challenge of rare tracheal hamartochondroma masquerading as COPD.

CONFLICT OF INTEREST STATEMENT

None declared.

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