Open Respiratory Archives 6 (2024) 100343

Sociedad Española de Neumología y Cirugía Torácica SEPAR

Open Respiratory Archives

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Clinical Image

Giant Tracheal Diverticulum in a Patient With Systemic Sclerosis: An Exceptional Case

Divertículo traqueal gigante en un paciente con esclerosis sistémica: un caso excepcional

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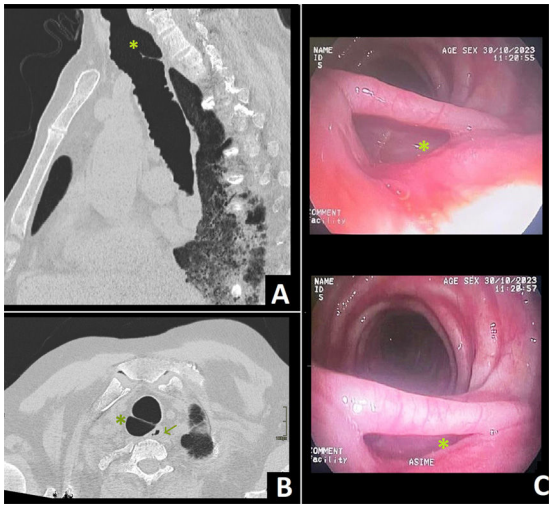

Fig. 1. (A) Thoracic CT with contrast, orthogonalplane, pulmonary window shows anorthogonal section of the tracheal diverticulum (*). (B) Thoracic CT with contrast, axial plane, pulmonary window shows an axial section of the tracheal diverticulum (*) as well as esophageal (arrow). C) Bronchoscopy shows the presence of diverticulum (*).

We present the case of a 64-year-old male, an active smoker with a 20 pack-year smoking history, a two-year history of pulmonary embolism, and recently diagnosed systemic sclerosis (SS). He was referred for evaluation of interstitial involvement, which was found to be compatible with secondary fibrotic non specific interstitial pneumonia due to autoinmune disease.

Diagnostic fibrobronchoscopy was performed to collect bronchoalveolar lavage, revealing the presence of a giant tracheal diverticulum, a previously undocumented occurrence in medical literature, of considerable size (Video).

The diagnosis was further supported by chest computed tomography (CT), which ruled out tracheoesophageal fistula and esophageal dilation secondary to SS (Fig. 1). Tracheal diverticulum, with an incidence between 1% and 4% in adults, is characterized by invaginations in the tracheal wall. It may manifest as either congenital or acquired and is often identified incidentally. Clinical presentation ranges from asymptomatic to chronic cough, dyspnea, recurrent pulmonary infections, and dysphonia.[1]

Definitive diagnosis relies on imaging studies such as CT and bronchoscopy. Treatment options include surgical resection, endoscopic cauterization, or conservative management, tailored according to the patient's symptomatic burden.[2]

In this specific case, given the absence of symptomatic sequelae, a conservative therapeutic approach was chosen, incorporating antibiotic therapy and physiotherapeutic measures. Consequently, the patient has remained free of any discernible complications.

Informed consent

Written informed consent was obtained from the patient for the publication of the article.

Funding

There was no funding source in this study.

Authors' contributions

- Fernando García: He has contributed to editing, case research, and image processing.
- Adriana Rodriguez: She has contributed to manuscript writing and bibliographic research.
- Maria Teresa Rio: She has contributed to case direction as well as editing and bibliographic citations.

Conflicts of interest

The authors declare that they have no conflicts of interest.

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https://doi.org/10.1016/j.opresp.2024.100343

Appendix A. Supplementary data

Supplementary data associated with this article can be found, in the online version, at doi:10.1016/j.opresp.2024.100343.

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