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A Case of Infected Tracheal Diverticula Mimicking a Mediastinal Mass

Mediastinel Kitleyi Taklit Eden Enfekte Trakeal Divertikül Olgusu

To the Editor,

We draw attention to this case of infected tracheal diverticulum as a rare condition mimicking a mediastinal mass. Tracheal diverticulum can occur as a rare congenital malformation or can be acquired in cases of chronic bronchopulmonary disease.

Among these, the acquired type can also develop with mucosal herniation in which the tracheal wall is weakened due to high intraluminal pressure. Diverticula is related to the airway, although this relationship may be too small to be seen in bronchoscopy. Although it is generally asymptomatic, symptoms associated with frequent infection, chronic cough and hemoptysis may be observed. Diagnoses are based on the identification of its relationship with the airway identified during thin-section tomography (1-4).

A 59-year-old female patient applied to our hospital with complaints of chronic cough and sputum, a history of coronary bypass 2 years earlier and no history of smoking. A Computed Thoracic Tomography (CT) was performed after the mediastinum was identified as wide in a chest X-ray (Figure 1), revealing a mediastinal lesion (Figure 2). A planned endobronchial ultrasound (EBUS) revealed a white, mobile plaque-like lesion in the mucosa, 3 cm above the right abdomen, distal to the tracheal (Figure 3), but no mediastinal mass. During a subsequent bronchoscopy procedure, the white plaque was removed, after which a purulent secretion and an inward diverticulum opening were observed in the trachea. Lavage was taken, and a pathological analysis of a biopsy of the bronchial mucosa taken from the diverticulum mouth revealed active ulcerative inflammation. A control CT scan was performed after the bronchoscopy. On CT, the diverticulum was partially emptied, and air densities were observed (Figure 4). The patient prescribed tazobactam/piperacillin and metronidazole treatment as an inpatient for 4 weeks, after which the patient was placed on amoxicillin/sulbactam and clarithromycin treatment as an outpatient for 2 weeks. A control CT revealed that the infected diverticulum had shrunk. (Figure 5), while a control bronchoscopy revealed that the diverticulum mouth had closed. (Figure 6).

Savaş Gegin

Department of Chest Diseases, Samsun Training and Resesarch Hospital Pulmonology, Samsun, Türkiye

Samsun Eğitim ve Araştırma Hastanesi Göğüs Hastalıkları, Samsun

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Correspondence (İletişim): Savaş Gegin, Department of Chest Diseases, Samsun Training and Resesarch Hospital Pulmonology, Samsun, Türkiye

e-mail: geginn@hotmail.com

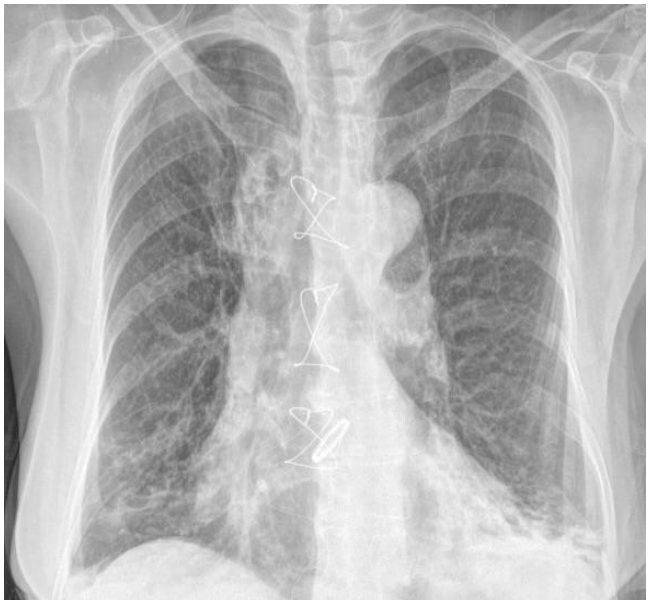

Figure 1: *Wide mediastinum revealed by PA chest radiography*

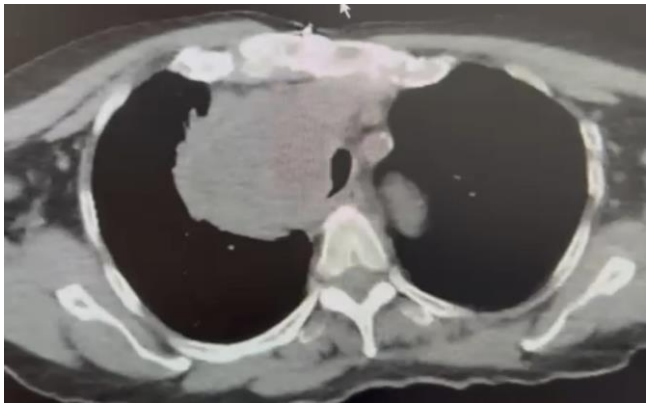

Figure 2: *Mediastinal lesion on thorax CT*

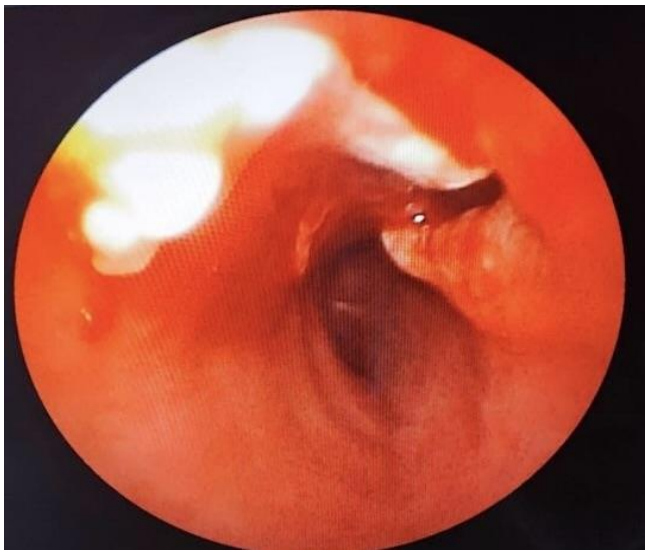

Figure 3: *Bronchoscopically, the mouth of the tracheal diverticulum opening into the trachea*

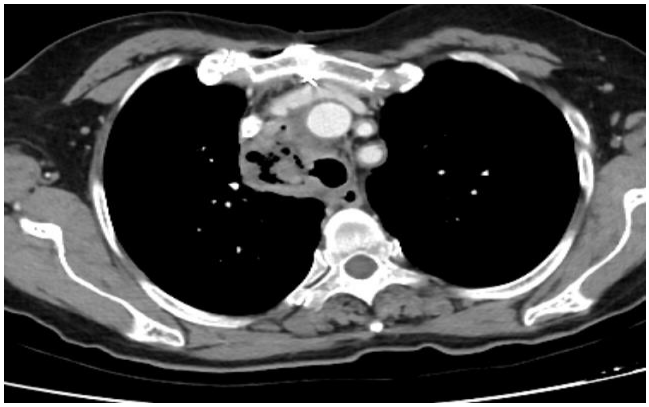

Figure 4: *Image of diverticulum draining after bronchoscopy. The connection between the diverticulum and the main trachea and the air density within the diverticulum*

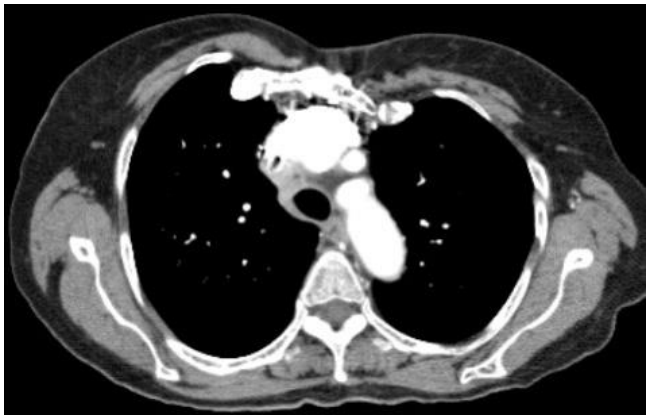

Figure 5: *Thorax CT after treatment*

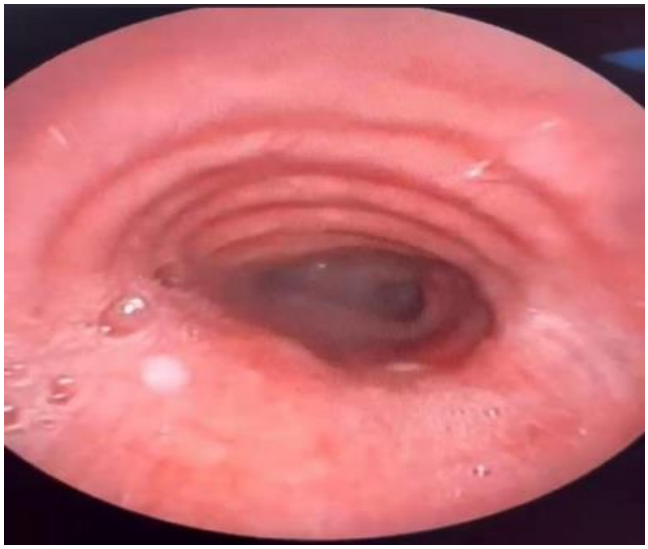

Figure 6: *Bronchoscopic image after treatment*

In conclusion, the potential for infected diverticula should be kept in mind as a rare cause of mediastinal masses.

CONFLICTS OF INTEREST

None declared.

AUTHOR CONTRIBUTIONS

Concept - S.G.; Planning and Design - S.G.; Supervision - S.G.; Funding - S.G.; Materials - S.G.; Data Collection and/or Processing - S.G.; Analysis and/or Interpretation - S.G.; Literature Review - S.G.; Writing - S.G.; Critical Review - S.G.

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