Tracheobronchopathia osteochondroplastica: innocuous but distressing

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DESCRIPTION

A 60-year-old non-smoker woman presented with dry cough, breathlessness on exertion and multiple episodes of haemoptysis from past 20 years. She reported nausea and vomiting since 20 days and jaundice since 15 days. She had received multiple courses of antibiotics and antitussives, syrups like levodropropizine 30 mg/ 5 mL, dextromethorphan 10 mg/ 5 mL due to symptoms mimicking chronic pharyngitis. Antitubercular treatment (ATT) was given due to haemoptysis on empirical basis from past 5 months as her mantoux test had shown an induration of 15 mm. Her clinical examination was within normal limit. Multiple chest X-rays taken over the years were also normal. Her liver function test (LFT) was as follows, serum total bilirubin: 2.1 mg/dL, aspartate aminotransferase: 410 U/L, alanine aminotransferase: 610 U/L, alkaline phosphatase: 180 U/L. ATT was stopped due to deranged liver function and as there

was no evidence of tuberculosis. Her LFT returned to normal after 10 days. Sputum for acid-fast bacilli and *Mycobacterium tuberculosis* cultures were negative on two consecutive occasions. Spirometry was suggestive of mild obstructive airway disease. High-resolution CT of thorax confirmed the diagnosis, which lead to the diagnosis in our patient (figure 1). Her symptom of breathlessness improved with inhaled formoterol and budesonide. The patient was asked to follow-up in the outpatient department once in 6 months and also if haemoptysis occurred in between. Bronchoscopy was not performed as the patient did not give consent for the procedure. Tracheobronchopathia osteochondroplastica (TO) is a rare disorder of unknown aetiology. Cough not responding to usual medical treatment is the most common symptom. Recurrent haemoptysis and breathlessness are the other symptoms. Wheezing occurs in patients with airway obstruction.¹ Calcification of major airways with sparing of the posterior wall and dense submucosal nodules can be seen in CT scan.¹ Direct visualisation at bronchoscopy usually confirms the diagnosis. TO needs no specific treatment; surgery may be warranted in patients with airway obstruction.¹

Figure 1 (A) High-resolution CT thorax showing calcification along the trachea and major bronchi. Submucosal nodular pattern can also be seen (arrows). (B) High-resolution CT thorax showing typical sparing of posterior wall (arrow).

Learning points

- ▶ Haemoptysis is not always due to tuberculosis even in high burden countries.
- ▶ Always confirm tuberculosis bacteriologically or histopathologically.
- ▶ Empirical antitubercular treatment (ATT) exposes patients to adverse effects.
- ▶ Always look for alternative diagnosis in patients not responding on ATT.
- ▶ Higher investigation like high-resolution CT should be used appropriately.

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REFERENCE

- 1 Leske V, Lazor R, Coetmear D, et al. Tracheobronchopathia osteochondroplastica: a study of 41 patients. *Medicine* 2001;80:378–90.

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