Tracheobronchopathia Osteochondroplastica: A Rare and Unusual Discovery

Traqueobroncopatia Osteocondroplástica: Uma Descoberta Rara e Inusitada

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Tracheobronchopathia osteochondroplastica (TO) is a rare benign disease,[1] with a 3:2 male to female ratio.[2] It is characterized by osteocartilaginous nodules in the distal trachea and main bronchi, sparing the posterior wall.[3] Although usually asymptomatic, it may cause dyspnoea, chronic cough, haemoptysis, and recurrent infections.[4] Its mechanisms are unclear but may involve squamous metaplasia, with no correlation to smoking.[2] Diagnosis requires histology to exclude conditions like sarcoidosis, amyloidosis or granulomatosis with polyangiitis.[5,6]

A 77-year-old hypertensive, non-smoking male presented with a one-week history of dyspnoea, productive cough and haemoptysis. Physical examination showed reduced breath sounds on the left, without respiratory failure. Laboratory tests revealed elevated C-reactive protein, with no other abnormalities. Chest computed tomography (CT) demonstrated diffuse micronodularity protruding into the airway in the distal trachea and main bronchi, sparing the posterior wall and causing lumen narrowing (Fig.1A-B).

Bronchofibroscopy revealed hardened polyps in the trachea with lumen narrowing (Fig. 2). Bronchoalveolar lavage was negative for bacteria, *Mycobacterium tuberculosis*, and malignant cells. Histopathology showed squamous metaplasia and mature bone and cartilage nodules.

There is no specific treatment for TO, but significant obstructions may be treated surgically or with laser.[5] TO's prognosis is generally favourable, but awareness of its complications is essential.[2] ■

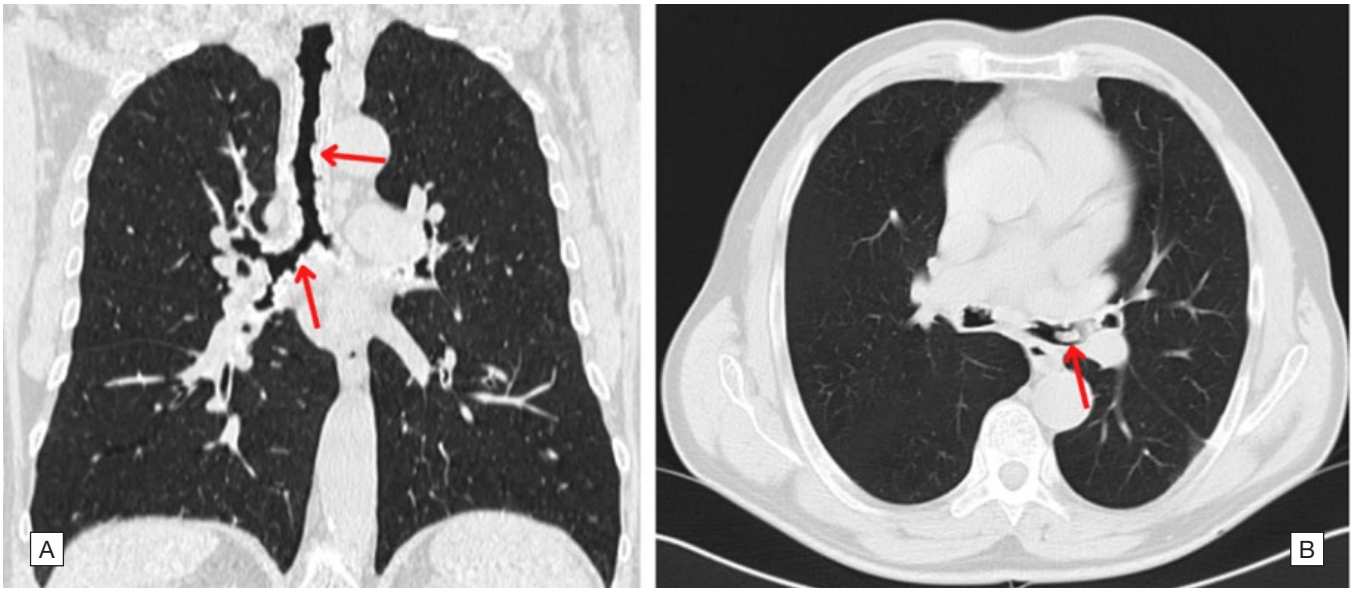

Figure 1: Tracheobronchopathia osteochondroplastica. **[A]**: Chest CT scan (coronal view) showing diffuse micronodularity in the distal trachea and main bronchi, sparing the posterior wall. **[B]**: Chest CT scan (axial view), showing calcified nodular opacities protruding into the airway lumen, resulting in lumen narrowing.

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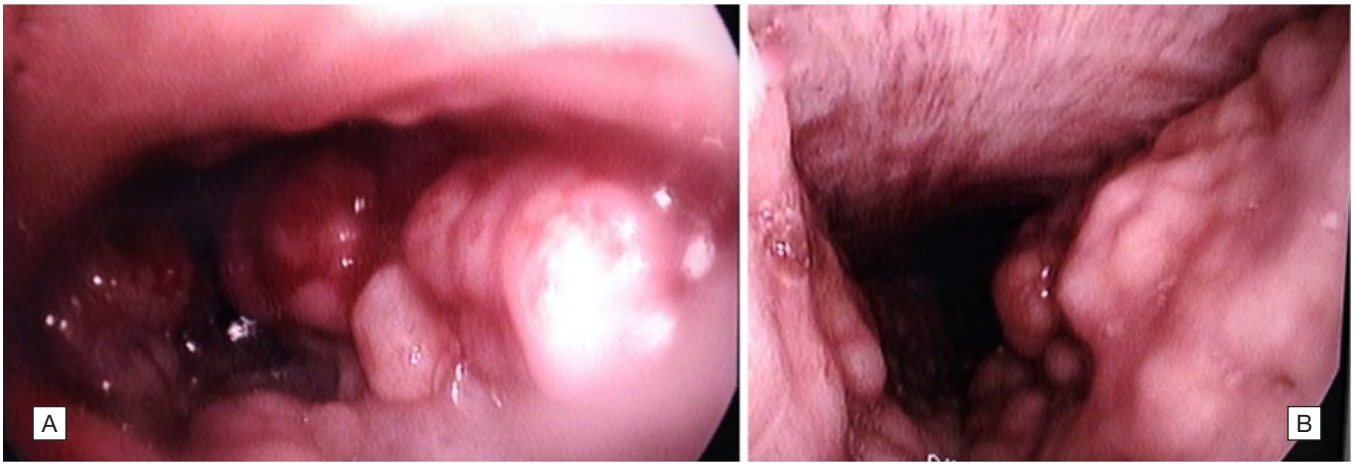

Figure 2: Tracheobronchopathia osteochondroplastica. **[A-B]**: Bronchoscopy image revealing multiple hardened polypoid formations in the trachea, sparing the posterior wall, leading to lumen narrowing, without signs of haemorrhage.

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