# A Case of Tracheal Amyloidosis Admitted with Rectus Abdominis Muscle Haematoma

The Editor,

Sir,

We describe a case of tracheal amyloidosis admitted with rectus abdominis muscle haematoma due to severe coughing. He was 53 years old and he had a history of uncontrolled asthma. Respiratory system examination was normal. There was a swelling on the right abdominal wall. There was an enlargement of the superior mediastinum, narrowing of the trachea and pleural thickening of the left hemithorax on chest X-ray. There were bilateral miliary nodules, calcified lymph nodes, pleural thickening and localized thickness in the middle-part of the right tracheal wall on computed tomography (CT) of the thorax CT (Fig. 1a-b).

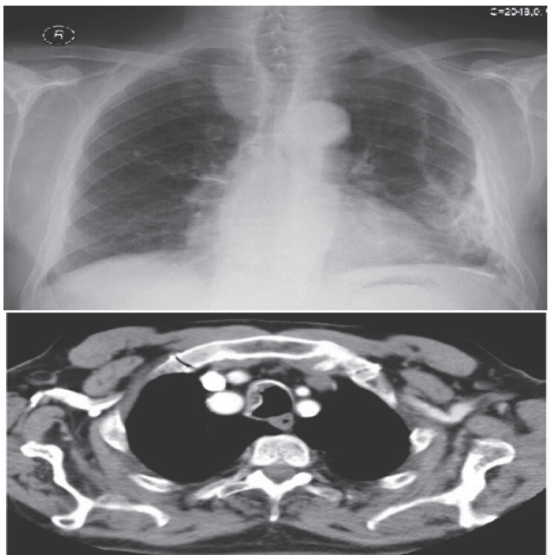

Fig. 1a-b: Enlargement of superior mediastinum in chest X-ray and localized thickness on middle-part of the right-side of the tracheal wall in computed tomography of the thorax.

There was an 18 x 7 x 5 cm sized heterogeneous density consistent with a haematoma in the right rectus abdominis muscle in a abdominal CT. Clinical follow-up was recommended for the muscle haematoma by the general surgeon.

Fibre-optic bronchoscopy revealed a polypoid lesion in the middle-part of the right lateral wall of the trachea (Fig. 2).

The microbiological and cytological evaluations of the bronchial lavage were normal. The biopsy specimens stained positive with periodic acid-schiff (PAS) and Congo red (Fig. 3a-b). Patient was diagnosed with secondary amyloidosis by presence of positive reaction for the AA protein in the immunohistochemical evaluation.

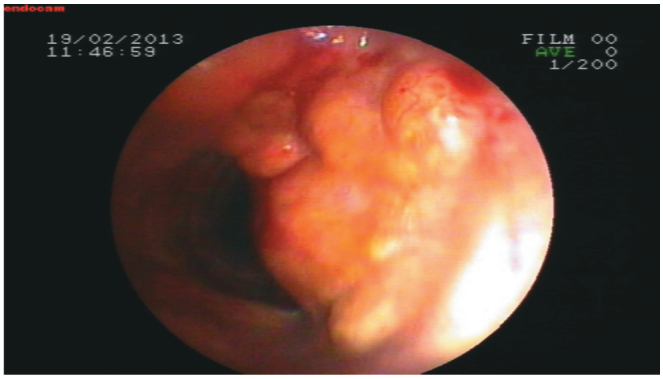


Fig. 2: Fibre-optic bronchoscopy revealed a polypoid lesion in the middle part of the right lateral wall of trachea.

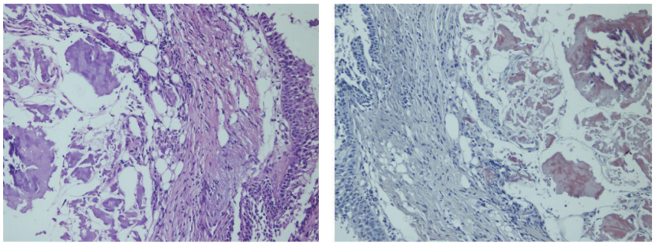

Fig. 3a, b: (a) The accumulation of eosinophilic amorphous material under respiratory mucosa showing squamous metaplasia (Haematoxylin – eosin x 200). (b) A positive reaction with Congo red staining (x 200).

Systemic involvement was ruled out by detailed systemic examinations. Open lung biopsy was recommended for parenchymal lung nodules but the patient did not accept the invasive approach. He was referred to a specialized centre for endobronchial therapy to reduce symptoms.

Amyloidosis is a local or systemic disease characterized by deposition of abnormal fibrillar and insoluble protein material in the tissues (1). Three forms of localized amyloidosis were seen in respiratory system; 1) nodular opacities, 2) diffuse opacities, 3) and tracheobronchial disease (2). The deposition of amyloid material as submucosal plaques and/or polypoid tumours is characteristic in tracheobronchial amyloidosis (3).

Tracheobronchial amyloidosis is frequent in men and usually occurs in the fifth or sixth decade (5). The cases present with cough, dyspnoea or haemoptysis and may be asymptomatic (1). The symptoms can mimic respiratory conditions such as asthma (3, 4). Severe cough can be associated with many complications and one of these complications is muscle haematoma. Nearly one-third of the rectus muscle haematomas occur, due to cough (5).

Computed tomography (CT) is the best non-invasive method for evaluation of tracheobronchial lesions (6). It ap-


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pears as circumferential wall thickening as well as luminal narrowing at various levels of the tracheobronchial tree on CT (7). Tissue biopsy and the avidity for Congo red and metachromatic birefringence under unidirectional polarized light remain the gold standard.

Most of the cases need therapeutic interventions such as surgical excision, argon coagulation, cryotherapy, radiotherapy, laser ablation and stent for the control of progressive symptoms and improve the functional status (8, 9).

We emphasize the importance of differential diagnosis of chronic cough. Tracheal pathologies should be kept in mind and bronchoscopic evaluation should be planned in refractory symptoms.

**Keywords:** Amyloidosis, cough, haematoma, trachea

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