Clinical Image

An Unusual Case of Pulmonary Amyloidosis Causing Pleural Effusion Diagnosed With Medical Thoracoscopy

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![Image](https://www.archbronconeumol.org)

Fig. 1. (A) Chest X-ray showing moderate to large right sided pleural effusion. (B, C) Pleural biopsy, Congo red stain in light (left) and polarized (right) microscope showing apple green birefringence consistent with amyloidosis.

Amyloidosis is extracellular tissue deposition of fibrils composed of variety of proteins. Different types include AA, AL and ATTR. An 82-year-old lady with history of AL type primary amyloidosis and chronic systolic heart failure presented to the hospital following a mechanical fall. Initial imaging studies showed multiple pelvic fractures and a moderate to large right sided pleural effusion. She underwent closed reduction and percutaneous fixation of her pelvic fractures. Post-procedure course was complicated by persistent hypoxia following which right sided thoracentesis was performed and 1000 cc of serosanguineous pleural fluid removed. Fluid analysis revealed a non-diagnostic exudative effusion (Fig. 1 table A). Patient underwent medical thoracoscopy with pleural biopsies and chest tube placement. Biopsy was consistent with amyloidosis (Fig. 1 B, C). Pulmonary amyloidosis develops in 1–2% of patients with systemic amyloidosis and can present with tracheobronchial infiltration, persistent pleural effusions (pleural amyloid deposits), parenchymal nodules (amyloidomas) and pulmonary hypertension. It can be challenging to differentiate between pleural effusion caused by amyloid-induced cardiomyopathy and pulmonary amyloidosis. Treatment entails management of primary disease and in some cases pleural catheter placement. Our patient refused pleurodesis and opted for repeated thoracentesis.

Authors’ contributions

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Conflicts of interest

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