Dear Editor,

Mediastinal cysts are benign lesions of mediastinum whose accurate diagnosis is based on the microscopic analysis of the lining epithelium and the cyst wall (1,2). The degeneration of mediastinal cysts has been rarely reported in the literature. The authors aimed to describe a well illustrated case of degenerated mediastinal cyst.

The authors report the case of a 31-year-old man, without a particular past medical history but with a smoking habit. The patient presented with a cough associated with dyspnea, and a weight loss of 12 kg in a 3-month period. Physical examination revealed a blood pressure of 130/80, a heart rate of 74 bpm, a temperature of 37°C, and a respiratory rate of 16 cycles/min. A search for the Koch bacillus in the sputum was negative. Chest-X-ray revealed a latero-tracheal shadow measuring 10 cm that was situated in the posterior mediastinum (Figure 1A). The CT-scan revealed a posterior and mediastinal mass in contact with D2 and D4 measuring 82x68 mm, without a costal invasion or lymph node metastases (Figure 1B). The diagnoses of a neurogenic tumour or a bronchogenic cyst were suspected. Cystectomy was performed. Perforation of the cyst wall was reported. The gross examination revealed a cystic mass with a necrotic content measuring 80x60x10 mm (Figure 2). The microscopic exam revealed a cystic wall with a largely ulcerated lining and preservation of foci lined by a single cell lining with some calcifications (Figure 3A). Tumour proliferation was observed within the cystic fibrous wall. The epithelium lining was ciliated (Figure 3B). The carcinomatous proliferation was solid and papillary. Tumour cells were ovoid and large, with abundant cytoplasm and nucleated nuclei (Figure 3C-D). Some lesions of dysplasia were noticed (Figure 3E). The possible diagnoses included a seminomatous tumour with a cystic foci, a non seminomatous tumour with cystic foci, thymic carcinoma with a cystic degeneration, a mesothelial cyst degenerated into a mesothelioma, a bronchogenic cyst degenerated into an adenocarcinoma, and an

![Figure 1: A) Chest-X-ray showing a 10 cm latero-tracheal shadow. B) CT-scan revealing a posterior and mediastinal mass in contact with D2 and D4 measuring 82x68 mm without costal invasion or lymph node metastases.](image1)

![Figure 2: Gross features of a cystic mass with a necrotic content.](image2)
Figure 3: A) Microscopic features showing a fibrous cystic wall lined by a single-layer lining (arrow) with some calcifications (star) (H&E; x200). B) In some foci, the cystic wall is thickened and lined by a unistratified epithelium (arrow) and hyperplastic epithelium (double arrow) with carcinomatous foci (star) (H&E; x200). C) Carcinomatous foci (star) within a cystic wall with a unistratified layer (arrow) and a hyperplastic epithelium (double arrow) (H&E; x250). D) Carcinomatous foci made of large cells with abundant clear cytoplasm and nucleated nuclei (H&E; x400). E) Microscopic features showing dyplastic lesions within atypical cells limited by a preserved basement membrane (arrow) (H&E; x400). F) Immunohistochemical features showing the expression of the cytokeratin antibody by the tumour cells (IHC; x200).
The degeneration of mediastinal cysts has been rarely illustrated because it represented a dysplastic lesion with a cystic lining showing a continuum with adenocarcinomatous foci.

**CONFLICT of INTEREST**
The authors declare no conflict of interest.

**REFERENCES**


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