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Clinical Image

Endobronchial High-Grade Non-Hodgkin B-Cell Lymphoma Mimicking Small Cell Lung Cancer

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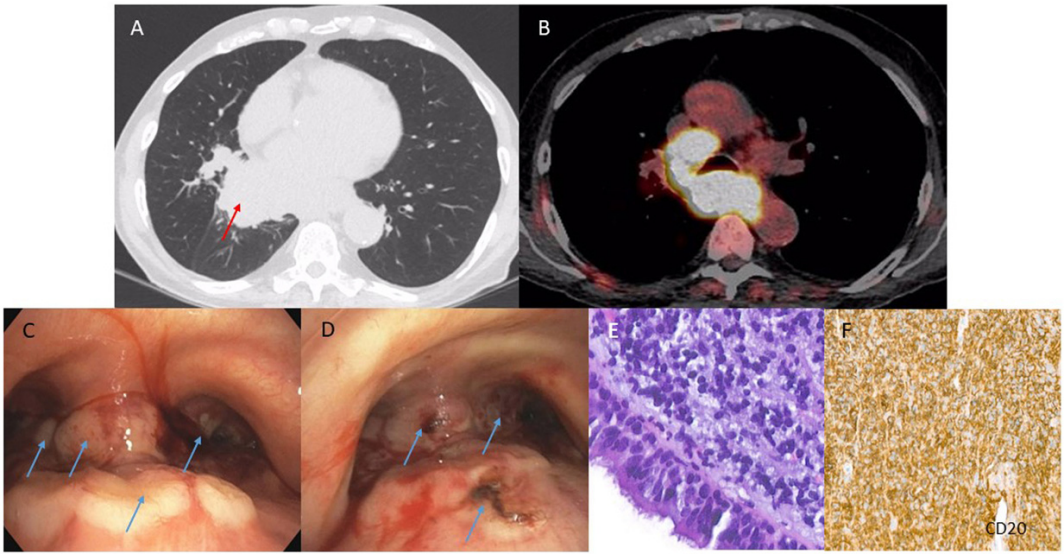

Fig. 1. Mass on axial view on pulmonary windowing (A, red arrow) and mediastinal enlarged lymph node stations (7 and 4R) on axial view on Positron Emission Tomography CT-scan showing a high avidity for fluorodeoxyglucose-F18 tracer (B, color). Endobronchial implants located at the distal *pars membranacea* of the trachea, main carina and main bronchi (C, blue arrows) treated by laser Argon-Beamer (D, blue arrows). Endobronchial samplings with solid growth neoplasm infiltrating the bronchial mucosa, made up of medium-sized cells, with moderately pleomorphic and hyperchromatic nuclei (E, hematoxylin–eosin staining 400×). Neoplastic cells express B-lineage marker CD20 (F). The diagnosis of B-cell lymphoma was also confirmed by molecular analysis.

High-grade pulmonary Non-Hodgkin B-cell lymphoma is rare and classics manifestations are systemic symptoms and post-obstructive pneumonia.[1] Radiological findings typically describe a single pulmonary mass associated with mediastinal or hilar adenopathies and endobronchial involvement is unusual.[1,2] Tissues samples show a solid neoplastic tissue, consisting of medium to large sized cells with marked nuclear pleomorphism. Lymphomatous cells express B-lineage markers (CD20, CD19, PAX5). Small cell lung cancer is associated with tobacco consumption and usually presents as a hilar mass associated with bulky hilum and mediastinal lymph nodes involvement.[3] Endobronchial involvement is rare. Neoplastic tissue shows a solid growth, small round/oval cells with high nuclear to cytoplasmic ratio. Neoplastic cells show a "dot-like" expression of cytokeratins and expression of neuroendocrine markers (Chromogranin-A, synaptophysin, CD56).[3]

A 82-years old former smoker patient was assessed for progressive asthenia and non-severe recurrent haemoptysis. The Computed Tomography-scan showed a right lower lobe sub-hilar mass (Fig. 1A) associated with bulky mediastinal adenopathies (Fig. 1B). The bronchoscopy documented the presence of well-vascularized endoluminal implants causing bleeding and treated by laser Argon-Beamer (Fig. 1C, D). Both samplings guided by endobronchial ultrasound at lymph nodes stations 7/4R and endobronchial targeted biopsies were consistent with diffuse large B-cell lymphoma (Fig. 1E, F).

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