00281 An unusual mediastinal mass

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Area and Category(at submission):

[WCBIP] Interventional pulmonology

Presentation Preference: Either

Case Report: YES

PURPOSE: An 80 year old female non smoker presented with a 20 lb weight loss and dysphagia but no fevers, nighsweats or pulmonary symptoms. Her history was significant for atrial fibrillation,hypertension ,diabetes and shingles. She had negative age appropriate cancer screening including colonoscopy and esophagogastroduodenoscopy . She had a family history of gastric , lung and breast cancer. She had no risk factors for tuberculosis and no travel to midwestern or south eastern United States . On exam she had a BMI of 24 with no palpable adenopathy and a normal respiratory exam.

METHODS: The chest tomography showed an anterior mediastinal mass measuring atleast 6cm in the retrocaval pretracheal space deviating the trachea to the left and associated with mediastinal adenopathy in the aortopulmonary and subcarinal areas. There was no hilar adenopathy, nodules or masses, pleural effusions or lytic bony lesions .There were multiple subcentimetre paraortic lymph nodes identified in the abdomen but no lesions in the liver, spleen, adrenal glands or kidneys. Labs showed an LDH of 212 U/L wth a normal complete blood count and chemistries.

RESULTS: She underwent EBUS guided TBNA of the subcarinal lymph node ,pretracheal lymph node and the mediastinal mass. Additional biopsies were obtained using a 19G needle. On bronchoscopy extrinsic compression of the trachea and right upper lobe bronchus was confirmed. ROSE confirmed the presence of adequate sample with lymphocytes and scattered granulomata and necrotic debris. She had a mediastinoscopy with partial excision of the mediastinal mass which was read as necrosis with scattered histiocytes and lymphocytes . All cultures and serology were negative. Flow cytometry revealed no aberrant lymphoid population. The mediastinal biopsy was then sent out to Mayo clinic where a congo red stain was performed showing apple green birefringence under polarised light microscopy consistent with amyloid.

CONCLUSIONS: The spectrum of pulmonary amyloidosis includes laryngeal, tracheobronchial, parenchymal (localised and diffuse), and mediastinal lymph node disease. There is no specific treatment advocated for isolated mediastinal amyloid and surgery/ stenting is reserved for those cases with symptoms from obstruction or compression of the airways, vascular lumen or esophagus.

CLINICAL IMPLICATIONS: The differential diagnosis for mediastinal adenopathy lymphoma, metastatic malignancies, granulomatous diseases as caseating infections such as tuberculosis and histoplastmosis . If the work up for lymphoproliferative disorders and plasma cell dyscrasias is negative , amyloidosis should be suspected and adequate tissue must be obtained for pathological examination and characterisation of the amyloid subtype