PSP - A rare cause of bilateral lung nodules

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Title: PSP – A rare cause of bilateral lung nodules

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A 53-year-old woman with a history of chronic dry cough was referred for evaluation of multiple lung nodules. Her past medical history included left maxilla ameloblastoma (treated with enucleation), hypertension, and dyslipidemia. Physical examination was unremarkable. CT Thorax revealed multiple lung nodules (Fig 1a), the largest measuring 1.6×2.2 cm, raising suspicion of malignancy. CT-guided biopsy was not deferred due to high risk of pneumothorax, and bronchoscopy revealed no endobronchial lesions. PET-CT showed mildly FDG-avid lesions in the right lower lobe and scattered non-avid nodules, suggesting possible primary lung cancer. The patient underwent right lower lobectomy via VATS. Histopathological examination confirmed pulmonary sclerosing pneumocytoma (PSP), a rare benign tumor. Subsequent CT showed stable nodules. PSP accounts for <1% of lung tumors and typically affects middle-aged Asian women. It often presents as a solitary, well-circumscribed, homogeneous nodule, though multiple or bilateral lesions can occur. Histologically, it comprises cuboidal surface and stromal round cells with variable patterns (papillary, solid, sclerotic, hemorrhagic). Diagnosis is based on histopathology and immunohistochemistry (Fig 1b&c). Follow up CT scan showed stable lung nodules (Fig.1d). Surgical excision is curative, and no adjuvant therapy is required. PSP should be considered in the differential diagnosis of indeterminate lung nodules.

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Artificial Intelligence involvement - used for grammar check (quillbot)

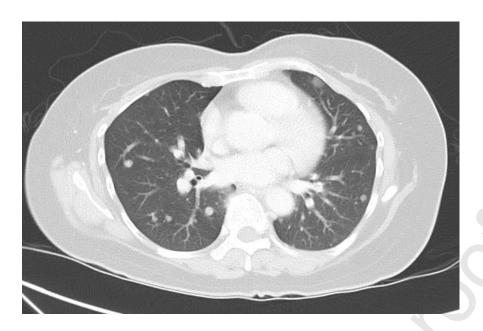


Fig. 1(a): Multiple lung nodules of different sizes are seen scattered in bilateral lung fields

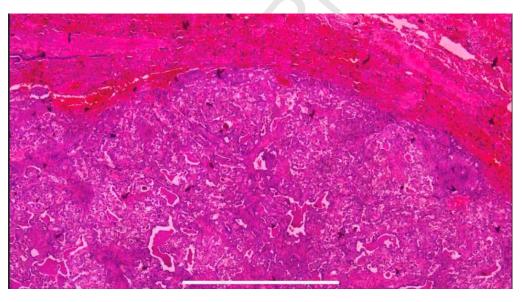


Fig. 1(b) Circumscribed solid mass with areas of fresh hemorrhage in the background (H&E, 4x)

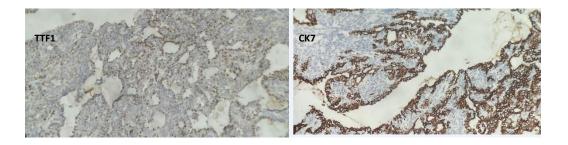


Fig. 1(c) Surface cells are positive for TTF1 and CK7. Occasional stromal cells are positive for TTF1 and CK7 immunostains (20x)



Fig. 1(d): The multiple solid lung nodules of varying sizes within both lungs are almost similar in number and size