

## A Case Report of Pleuropulmonary blastoma, type 1 in middle-aged adult

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**Background:** Pleuropulmonary blastoma(PPB) is malignant dysontogenetic neoplasm of childhood, characterized histologically by a variably mixed blastematos and sarcomatous patterns. PPB typically presents in a pediatric age and its occurrence in aged adult is very exceptional worldwide. We report a rare case of PPB in a middle-aged women.

**Case report:** A 56-year-old woman was referred for further evaluation of cystic lesion on screening chest x-ray. She did not complain about any respiratory symptoms and did not have any specific medical and family history. There was no remarkable finding on physical examination. The initial chest CT showed thin walled air filled cyst, suspected of intrapulmonary bronchogenic cyst or congenital pulmonary airway malformation(Figure 1-A). The chest CT, followed after 6 months, showed size growth of cystic lesion. Video-assisted thorascopic wedge resection of the left lower lobe was done for diagnosis. Histologically, the multilocular intrapulmonary cyst showed focal myogenic differentiation with fibrosis of cyst wall(Figure 1-B). The focal myogenic cells were positive for desmin, which was highly suspicious for regression change of pleuropulmonary blastoma, type 1 (Figure 1-C). She was diagnosed the pleuropulmonary blastoma, type 1, regressed type and have been under the follow up care. Figure Figure 1.(A) CT shows thin walled air filled cyst in left lower lobe. Figure 1.(B) Pleuropulmonary blastoma (H&E). Multilocular intrapulmonary cyst with focal proliferation of myogenic cell and fibrosis of cyst wall suggesting regressive change of pleuropulmonary blastoma. Figure 1.(C) Focal myogenic cells are positive for desmin.

**Discussion:** According to previous reports, pleuropulmonary blastoma(PPB) is a rare and highly aggressive pulmonary malignancy in children, but it is rarely found in adults. Although little is known about its clinical features, the regressive type of PPB shows a benign nature. In conclusion, it is important to note that type I PPB could be hard to differentiate from other benign cystic lung lesions on imaging studies; thus we should consider the possibility of PPB in differential diagnosis of cystic lung lesions.

