INTERNAL MEDICINE

□ PICTURES IN CLINICAL MEDICINE □

Multifocal Micronodular Pneumocyte Hyperplasia with Tuberous Sclerosis

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Key words: multifocal micronodular pneumocyte hyperplasia, tuberous sclerosis

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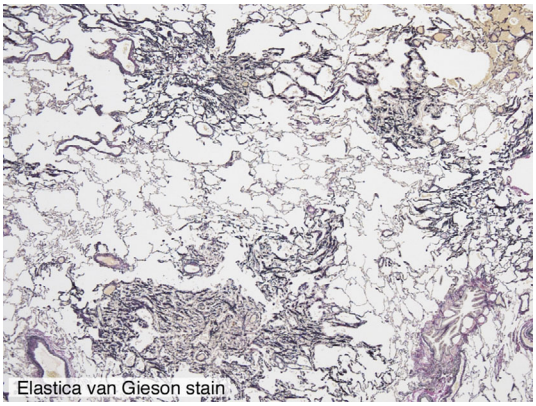
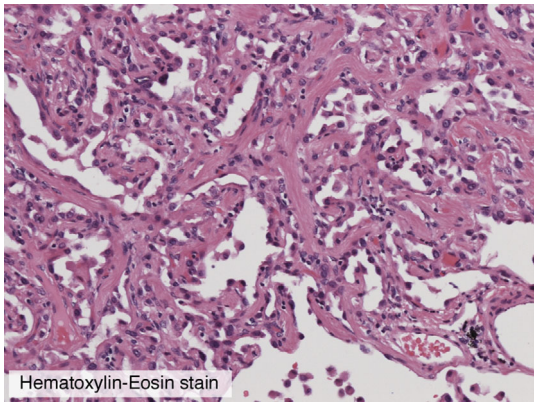
Picture 1.

Picture 2.



Picture 3.



Picture 4.

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A 56-year-old Japanese male diagnosed as having tuberous sclerosis and renal angiomyolipoma was hospitalized for the treatment of diffuse nodular opacity throughout the entire lung field on a chest radiograph. He had no respiratory symptoms. Chest computed tomography revealed multiple small nodules with a random distribution in both lungs (Picture 1, 2). The histopathological findings of video-assisted thoracoscopic (VATS) wedge biopsy specimens demonstrated that numerous nodules were composed of a proliferation of either enlarged type II pneumocytes or neoplastic club cells [an atypical adenomatous hyperplasia-like (AAH) histology] and a marked increase in the number of elastic fibers at the septae of the lesions (Picture 3, 4). These cells lacked any marked nuclear atypia and/or mitotic figures. Immunohistochemical investigations showed the proliferating epithelial cells to be negative for carcinoembryonic antigen, positive for thyroid transcription factor-1, scattered weakly positive for p53, weakly positive for tuberous sclerosis 1, and low MIB-1 (<1%). We diagnosed the patient with multifocal micronodular pneumocyte hyperplasia (MMPH) based on the patient background and histological findings.

MMPH is a common pulmonary manifestation of tuberous sclerosis (1), although it also occurs in patients without any clinical findings of this disease (2). The prognosis is comparatively good; however, a small number of cases result in respiratory failure.

The authors state that they have no Conflict of Interest (COI).

References

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