Cell Blocks Used to Diagnose Primary Effusion Lymphoma-like Lymphoma

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Key words: pleural effusion, adenosine deaminase (ADA), tuberculous pleurisy

(Intern Med 53: 335-336, 2014)

(DOI: 10.2169/internalmedicine.53.1584)

Picture 1.

Picture 2.

Picture 3.

Picture 4.

An 86-year-old man with a history of pulmonary tuberculosis was referred to our hospital for right pleural effusion (Picture 1, 2). His past history, exudative effusion and increased level of pleural adenosine deaminase (ADA)(110.5 IU/L) suggested tuberculous pleuritis (1). However, a

slightly elevated serum level of soluble IL-2 receptor (576 U/mL) and the cytology suggested malignant lymphoma (Picture 3). Due to the lack of a solid mass in addition to the pleural effusion, cell blocks were prepared from the pleural effusion, which demonstrated strongly atypical cells.

Immunohistochemistry showed that these cells were positive for CD20 (Picture 4) and negative for CD3, human herpes virus type 8 (HHV-8) and Epstein-Barr virus encoded RNA (EBER)-1. Therefore, the patient was diagnosed with primary effusion lymphoma-like lymphoma. Cell block creation has the advantage of being useful for pathological analyses, such as immunohistochemistry and in situ hybridization. It is important to perform pathological analyses using cell block creation if a patient with pleural effusion requires a further differential diagnosis (2).

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

References

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