00485 Diagnostic efficacy of endobronchial ultrasound-guided transbronchial needle aspiration in malignant lymphoma

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BACKGROUND

The diagnostic accuracy of endobronchial ultrasound-guided transbronchial needle aspiration (EBUS-TBNA) for the diagnosis of malignant lymphoma in patients with mediastinal lymphadenopathy is not well defined. We therefore reviewed our clinical data and pathological findings to examine the clinical use of EBUS-TBNA in patients with mediastinal lymphadenopathy diagnosed finally as malignant lymphoma.

METHODS

A retrospective review was performed of all patients with mediastinal lymphadenopathy referred for EBUS-TBNA between April 2006 and November 2013 in whom EBUS-TBNA examinations were performed and final diagnoses were malignant lymphoma. Mediastinal biopsy specimens were taken using an ultrasonic bronchoscope (Olympus BF-UC 260F) and a 21/22-gauge cytology needle (NA-201 SX-4021/SX-4022 Olympus) with on-site cytopathological support. The EBUS-TBNA result was compared with a reference of standard pathological tissue diagnosis and clinical data.

RESULTS

EBUS-TBNA identified atypical cells in 8 out of 10 patients (80%) with hematoxylin and eosin staining. The accurate diagnosis for malignant lymphoma was 70% (7 out of 10 patients) with a combination of immunohistochemistry, in case only EBUS-TBNA examinations were applied. False negative cases were 3 out of 10, in which EBUS-TBNA specimens were small amount for diagnoses of malignant lymphoma. The main causes for false negative diagnoses were due to inadequate amount of samples.

CONCLUSION

EBUS-TBNA is a safe and useful tool in the investigation of suspected malignant lymphoma, if adequate amount samples are taken and/or ancillary studies like immunocytochemistry are applied. In those cases, it may diminish the need for more invasive procedures such as mediastinoscopy.