

EBUS-TBNA超声内镜对纵隔肿大淋巴结良恶性的鉴别诊断价值

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Title: Differential diagnosis of benign and malignant mediastinal enlarged lymph nodes under endoscopic ultrasonography during EBUS-TBNA

作者: 赵聪选; 于 韬; 王文慧; 叶冬燮; 周宏岩
中国医科大学肿瘤医院, 辽宁省肿瘤医院超声科, 辽宁 沈阳 110042

Author(s): Zhao Congxuan; Yu Tao; Wang Wenhui; Ye Dongman; Zhou Hongyan
Department of Diagnostic Ultrasound, Cancer Hospital of China Medical University, Liaoning Cancer Hospital & Institute, Liaoning Shenyang 110042, China.

关键词: 支气管内超声引导针吸活检; 纵隔; 淋巴结肿大; 超声; 超声特征

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摘要: 目的: 分析超声内镜引导下经支气管针吸活检(endobronchial ultrasound-guided transbronchial needle aspiration, EBUS-TBNA)术中肿大纵隔淋巴结的超声图像特点, 探讨EBUS-TBNA超声内镜对纵隔淋巴结良恶性的鉴别诊断价值, 以期提高EBUS-TBNA对纵隔淋巴结恶性病变的活检率。方法: 回顾性分析2014年10月至2018年11月行EBUS-TBNA患者的超声内镜图像。我们使用以下EBUS超声内镜特征来预测淋巴结的良恶: 回声, 长轴长度, 短轴长度, 纵横比, 形态, 边界, 淋巴门有无, 淋巴结内血流信号分级。将超声检查结果与最终病理结果或临床随访结果进行比较。采用SPSS 20.0软件进行统计学分析, 采用logistic回归分析评价肿大淋巴结EBUS-TBNA超声内镜下的特征与良恶性的相关性, 以 $P < 0.05$ 为标准判定差异有统计学意义。结果: 对130例纵隔淋巴结肿大患者的227个淋巴结进行回顾性分析, 67.4%的肿大淋巴结被证实为恶性转移。Logistic回归分析显示回声、长轴及短轴的长度、正常淋巴门结构的消失是诊断恶性淋巴结的独立预测因素。结论: 纵隔恶性淋巴结具有一定的超声特征, 可以通过这些超声特征提高EBUS-TBNA对纵隔恶性淋巴结的检出率。

Abstract: Objective: To analyze the characteristics of sonographic features of enlarged mediastinal lymph nodes during endobronchial ultrasound-guided transbronchial needle aspiration (EBUS-TBNA), and to explore the value of endoscopic ultrasonography in the differential diagnosis of benign and malignant mediastinal lymph nodes during EBUS-TBNA, so as to improve the biopsy rate of malignant mediastinal lymph nodes during EBUS-TBNA. Methods: EBUS-TBNA patients from October 2014 to November 2018 were retrospectively analyzed. The following sonographic features during EBUS-TBNA were used to predict the lymph nodes: echogenicity (homogeneous or heterogeneous), long axis length, short axis length, aspect ratio, morphology, margin, presence or absence of normal hilus, and blood flow classification. The results of sonographic examination were compared with the final pathological results or clinical follow-up results. SPSS 20.0 software was used for statistical analysis, and logistic regression analysis was used to evaluate the correlation between benign and malignant lymph nodes and sonographic characteristics during EBUS-TBNA. $P < 0.05$ was used as the standard to determine that the difference was statistically significant. Results: In a retrospective analysis of 227 lymph nodes in 130 patients with mediastinal lymphadenopathy, 67.4% of the enlarged lymph nodes were confirmed as malignant metastases. Logistic regression analysis showed that the echogenicity, the long and short axis length and absence of normal hilus were independent predictors of the diagnosis of malignant lymph nodes. Conclusion: Mediastinal malignant lymph node has certain sonographic characteristics, and the detection rate of EBUS-TBNA for mediastinal lymph node metastasis can be improved through these ultrasonic characteristics.

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