

Efficacy of Endobronchial Ultrasonography With a Guide Sheath for Diagnosing Peripheral Lesions with Benign Disease.

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Background: Diagnosis of benign pulmonary lesions located at peripheral site is crucial since accurate diagnosis could directly influence treatment strategy. Study objective: To evaluate the ability of endobronchial ultrasonography with a guide sheath (EBUS-GS) for diagnosing benign pulmonary lesions at peripheral pulmonary site. Methods: We retrospectively reviewed 49 patients with 49 peripheral pulmonary lesions (PPLs) finally diagnosed as benign diseases from October 2010 to September 2013 in our hospital. To assess the efficacy of bronchoscopy with EBUS-GS, we defined grade for bronchoscopy contribution according to the previous report as follows: grade A, definitive diagnosis obtained by bronchoscopy alone; grade B, definitive diagnosis obtained by bronchoscopy with information about clinical features; grade C, definitive diagnosis not obtained by bronchoscopy even with information about clinical features, although suspected findings were obtained by bronchoscopy; and grade D, no suspected findings obtained by bronchoscopy and no definitive diagnosis obtained. Grade A and B were defined as positive results with definitive diagnosis of benign pulmonary disease. Results: Final diagnosis of 49 PPLs included 14 cases of bronchopneumonia, 10 cases of mycobacteriosis, 5 cases of organizing pneumonia, 5 cases of abscesses, 6 cases of inflammatory change and 9 other benign diseases. Among 49 PPLs, definitive diagnosis was obtained by EBUS-GS in 37 lesions (72.5%). Lesions in which the probe was advanced to within the lesion had a higher diagnostic yield (81.8%) than did lesions in which the probe was adjacent to the lesion (58.3%; $p < 0.05$) or outside the lesion (50%). Conclusions: EBUS-GS is a useful method for diagnosis of PPLs with benign disease.