Title: Transesophageal ultrasound-guided fine needle aspiration (EUS-guided FNA) as first diagnostic step of intrapulmonary lesions

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Body: Background: Bronchoscopy fails to establish a diagnosis in up to 30% of patients with centrally located lung cancer. EUS-guided FNA has been used for the diagnosis of suspected lung cancer near or adjacent to the esophagus in patients who had undergone a non-diagnostic bronchoscopy. Aim: To prospectively assess the feasibility and yield of EUS-FNA as first diagnostic step in the diagnosis of intrapulmonary tumours located near or adjacent to the esophagus. Study design: Patients with a CT-scan of the chest revealing an intrapulmonary tumour located near or adjacent to the esophagus were enrolled. They underwent EUS-FNA (Olympus, GF UCT 160) under deep sedation. Results: Fourteen patients were included, and EUS-FNA diagnosed lung cancer in all cases (12 NSCLC, 2 SCLC) (yield=100%). No complications occurred. The subtyping of (N)SCLC was allowed by cytological specimens in 9 cases (65%), by cell blocks in 3 cases (21%), whereas NSCLC could not be subtyped in 2 cases (14%). Conclusions: EUS-guided FNA might represent the first diagnostic step in patients with intrapulmonary tumours located near or adjacent to the esophagus.