The Clinical Impact of Endoscopic Ultrasound-guided Trucut Biopsy on Gastric Subepithelial Tumors

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Introduction: Endoscopic ultrasound-guided trucut biopsy (EUS-TCB) is a useful method for the pretherapeutic evaluation of upper GI cancer. We evaluated the impact of EUS-TCB on the clinical management of patients with gastric subepithelial tumors (SETs).

Patients and Methods: A total of 56 patients with gastric SET which was 2 cm of size or over underwent EUS-TCB from 2007 to September 2010 at Asan Medical Center. The clinical impact was assessed according to the treatment guideline by size criteria. The diagnostic yield of EUS-TCB was 37/56 (66.1%). The immunohistochemical staining was possible in 33 patients. The diagnoses of gastric SETs based on EUS-TCB were gastrointestinal stromal tumor (19 cases), leiomyoma (10 cases), ectopic pancreas (5 cases), schwannoma (1 case), carcinoid tumor (1 case) and carcinoma (1 case).

Results: The change of treatment modality was occurred in 16 cases (43%). Seven patients could avoid unnecessary surgical resection and 6 patients underwent surgical resection instead of observation due to malignant potential. Follow up interval was increased in 9 cases (24%) which were diagnosed as ectopic pancreas or leiomyoma under 3cm of size.

Conclusions: EUS-TCB is useful to diagnose gastric SETs as well as to have an influence on clinical decision on the management of gastric SETs.