

LETTER TO THE EDITOR

(*J Bangladesh Coll Phys Surg 2015; 33: 107-108*)

To

Editor in Chief

Journal of Bangladesh College of Physicians and Surgeons

Sir,

I would like to thank you for publishing the article “Endoscopic Ultrasound: A New Hope for Patients” in Journal of Bangladesh College of Physicians and Surgeons 2015 ; 33: 23-31 . I have read the article thoroughly and discovered that the article had reviewed some important new information on standard applications of EUS that should be adopted into our clinical practice. The article is knowledgeable and is a reflection of the current trend of application of EUS, with most of the emphasis on EUS-FNA and EUS-guided interventions. The article also provides a glimpse into the future through EUS-guided new technology, like in certain treatments, e.g. draining pancreatic pseudocysts, biliary access, intramural therapy.

Although EUS has enhanced our ability to diagnose and treat a variety of GI conditions, there are many queries regarding the ability of EUS. I would like to highlight a few of them in short:

- (1) EUS was first introduced into clinical practice in the 1980s and has rapidly evolved into a reliable technique for diagnosis of lesions of digestive tracts. But at present one of the most common indications of EUS is esophageal cancer staging. Recently some literature has raised the question of accuracy of EUS in staging of early esophageal cancer. Prognostic and therapeutic decisions in esophageal cancer hinge on accurate tumor staging^{1,2,3}. Upon evaluation of 12 studies, recent literature revealed that EUS correctly predicted the T-stage with only 65% accuracy. It concluded that pre-treatment EUS for intramucosal esophageal adenocarcinoma is unnecessary, might, in fact, be misleading.
- (2) Gastric cancer staging with EUS: Does it help determine who needs neoadjuvant therapy and is it better than CT imaging? The purpose of clinical

staging gastric cancer is to determine which patients have locoregional resectable disease versus systemic involvement. The only accepted criteria for unresectable gastric cancer are the presence of distant metastasis or invasion of major vessels such as the aorta or celiac axis (including hepatic, proximal splenic arteries)^{4,5}. So for both the esophageal and gastric cancer, an “outside-in” approach is recommended. Cross-sectional imaging such as CT is a useful first step to rule out distant/metastatic disease.

- (3) Does the stylet aid or hinder the EUS-assisted fine needle aspiration?
- (4) Does needle size matter in endoscopic ultrasound-fine needle aspiration of solid lesions?
- (5) Contrast-enhanced harmonic EUS: is it going to be more potential in application for diagnosis of malignant potential of gastrointestinal stromal tumors? (6)

I, again thank the author for sharing such wonderful and up-to-date information with us.

Dr. Ahmedul Kabir

Associate Professor, Dept. of Medicine, Dhaka Medical College, Dhaka

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Author's Reply

To
Editor in Chief
Journal of Bangladesh College of Physicians and Surgeons

Sir,

I am thankful to the learned reader for his keen interest in the subject and inspiratory remarks. I duly honor his valuable comments

given in (1) and (2). Regarding his queries (3), (4) and (5) I shall try to give the best answer.

Stylet does not hinder EUS FNA but having said that evidence has not shown it to be any better either.

Needle with stylet is stiffer than without it. Expert opinion differs regarding its use. In our centre it was used regularly.

Stylet helps to exclude obstructing tissue plugs inside the needle tip by reintroducing it when the needle is advanced into the lesion under ultrasonic guidance and then removed completely.

In endoscopic ultrasound-fine needle aspiration of solid lesions, technique matters rather than the needle size.

In few cases, punch technique is the only way to penetrate hard lesions. Usually, needles we use are 25

gauge for pancreas lesions, 19 gauge for wall lesions and 22 gauge for lymph nodes.

Contrast harmonic endosonography (CHEUS) is not widely available. Unlike CT and MRI examinations, contrast agents

are not routinely used to enhance images during EUS. In spite of the good performance characteristics of EUS and EUS-FNA,

differentiation of malignant from inflammatory masses and assessment of tumor extent remain challenging. CHEUS uses a

second generation ultrasonic contrast agent and depicts intratumoral vessels in real time. CHEUS improved the visualization of tumor margins and vascular invasion and differentiated benign from malignant masses. It identified irregular vessels and thereby predicted GIST malignancies with a higher sensitivity, specificity and accuracy than that of high-grade malignancy GISTs by EUS-guided FNA. In a single center study, CHEUS successfully visualized intratumoral vessels which may play an important role in predicting the malignancy risk of GISTs.

Enthusiastic and thoughtful comments as given by Dr. Ahmedul Kabir are always welcome.

Warm regards

Colonel (Prof) Shaila Perveen.

Classified Medicine Specialist and Gastroenterologist
CMH Jessore.