



ESPS Peer-review Report

Name of Journal: World Journal of Gastroenterology

ESPS Manuscript NO: 8869

Title: Optimizing diagnostic yield of endoscopic ultrasound-guided fine-needle aspiration by risk assessment in patients with suspected malignancies adjacent to the gastrointestinal tract.

Reviewer code: 01489938

Science editor: Gou, Su-Xin

Date sent for review: 2014-01-11 16:20

Date reviewed: 2014-01-29 04:41

Table with 4 columns: CLASSIFICATION, LANGUAGE EVALUATION, RECOMMENDATION, CONCLUSION. It lists evaluation criteria from Grade A to E and corresponding search results for Google and BPG.

COMMENTS TO AUTHORS

In the submitted article the authors report on their experience with endoscopic ultrasound (EUS) guided fine-needle aspiration of suspectedly malignant lesions adjacent to the gastrointestinal tract during a period of 12 years. The large patient number, the low number of complications and the 30 months of post-procedure follow-up give a very solid base to the study and highlight the excellence of the Endoscopic Center. Besides sampling the traditional targets the endosonographer punctures the lung, left adrenal gland, ovarian cysts and the thyroid gland with great precision, which proves a high level of endoscopic expertise. In addition to summarizing their long-term experience and the quality measures of the performed EUS-FNA procedures, the authors attempt to use a scoring system to approximate malignancy risk based on blinded evaluations by three specialists (radiology, oncology, surgery) to guide the decision of sampling by EUS and the timing of the EUS procedure. Major remarks A multidisciplinary work is definitely helpful in the process of clinical decision making, in choosing what the best option is for the patient and to design the optimal treatment strategy. The "subjective" discussion between multiple disciplines was helpful in separating benign lesions (only appr. 3.5% malignant), however in predicting the malignant lesions (appr. 40% benign) the sensitivity was rather low. In cases where malignancy was more obvious based on interpretation of the team, the sensitivity of sampling was higher, partly due to more advanced stages (bigger lesions?, rate of R0 resections?, overall survival after surgery?, what % was really curable?) resulting in a higher degree of sampling accuracy. Although the true positive patients were higher (around 80%) in the MRS3 group, all true positive cases in all groups (100% in groups MRS1-3) have been



## Baishideng Publishing Group Co., Limited

Flat C, 23/F., Lucky Plaza,  
315-321 Lockhart Road, Wan Chai, Hong Kong, China

---

treated, therefore the reviewer sees no evidence proving that a higher rate of patients would receive early treatment in the MRS3 group. However, even if the number of true positives in the MRS1 group is only around 10%, the positive patients are definitely not "low risk" cases, and the EUS procedure shouldn't be delayed based on these assumptions until we have a more reliable/objective predictor at hand. In the MRS0 group (the reviewer finds no information on the type of these lesions) it would be better to do sampling to catch the premalignant lesions at an early stage (depending on the organ) and also do sampling in potentially malignant cases (even if the preoperative MRS judgement was different). Especially in these groups (MRS1-2) should the sensitivity by EUS guided FNA be higher compared to the sensitivity values described in the literature (sensitivity in the MRS2 group is 79%). Unfortunately, mixing the results from many organs in one pool makes the whole study too heterogenous, confusing and the results unspecific. The authors did manage to enrich malignant cases with SMTE prior to EUS, however the methods used are not described in detail, not standardized, not objective or reproducible, therefore the scientific value to the GI community is rather low. Proper description of endoscopic methodology, and detailed presentation of the cytology results subdivided to the different organ groups would strengthen the paper. In the opinion of the reviewer the evidence is lacking to support the conclusions regarding the use of the SMTE system, therefore the system should be discussed in less detail and excluded from the conclusions. Minor remarks 1. Methodological details needed: how many endoscopist?; how many repeated endoscopies?; Same amount of needle passes, examination numbers between the different MRS groups?; The number of needle passes and size of needle should also affect outcome measures. 2. The results section is very short, the numbers from Table 3 are hardly discussed at all. 3. Inconsistent numbers (Table 1): 455 surgeries mentioned in Results section (some were detec