

**Name of Journal:** World Journal of Gastroenterology

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**Manuscript Type:** Randomized clinical trial

**Title:** 22-gauge Core versus 22-gauge Aspiration Needle for EUS-guided Sampling of Abdominal Masses

Dear Editor,

Thank you very much for reviewing our work and considering it for possible publication in your Journal. We are also thankful to all reviewers for their valuable contribution. Below you can find our replies to reviewers' comments. All changes in the revised manuscript are highlighted, as requested. Additionally, we addressed all the comments made by the Editor. Accordingly, we uploaded an audio core tip file, we merged Tables 3a and 3b into one (Table 3) and we uploaded separately the images (i.e. Figures 2 and 3).

**Reviewer 3646582**

**Comment:** *This study is well conducted and its conclusions will certainly contribute to the future use of EUS-FNA as a safe and established method of tissue acquisition, as well as make the needle type choice an easier decision. Conclusion that "endoscopists could base the choice of the needle type for EUS-FNA in other parameters (i.e. availability, cost, procedural times)" is well justified in this paper, since all the main parameters regarding diagnostic accuracy are equal for the both types of the needles. From personal experience I could only add a comment that immunocytochemistry is easy to perform on cytological materials contributing to the higher diagnostic accuracy. Moreover, due to the DNA friendly fixatives used for cytology as well as preservation of the whole cells rather than "cut" cells, cytological slides in various forms are an excellent source for ancillary molecular studies, especially DNA based PCR studies and FISH.*

**Answer:** Thank you very much for your comments. Accordingly, we added a comment regarding immunocytochemistry and molecular studies (see Discussion, first paragraph).

**Reviewer 2953223**

**Comment:** *This is an interesting and well-planned study. It is well-written, on the whole, although there are scattered instances of poor English which need to be improved, perhaps by asking for review by a native English speaker. The number of patients studied is small. Many international readers will struggle to understand how EUS-FNA can be successfully carried out without on-site cytopathology, particularly where even processing of material obtained is carried out by the endosonographer him- /her-self. This ought to be explained further. The authors state that "the number of passes depended on the examiners estimation of the yielded material". In the absence of on-site cytopathology, can they please explain how, exactly, this is done? The authors state, in two places, that EUS-FNA samples may be inadequate for diagnosis of some conditions, including especially lymphoma. In actual fact, immunohistochemistry, as well as flow cytometry can be used with samples obtained at EUS-FNA not only to confirm a diagnosis of lymphoma but also to accurately subtype it. The literature is now available to support this. The authors might care to review this aspect of their paper and discussion.*

**Answer:** We are thankful for your comments. Based on them, our revised manuscript was reviewed by a professional medical translator who also provided us with a language editing certificate. Additionally, we recognized the small number of study participants and the lack of on-site cytopathologist as limitations of our study (see Discussion). We also added a more detailed description of the initial specimen assessment and processing by the examiners (see Procedures). Finally, we included a comment regarding immunocytochemistry and flow cytometry in lymphoma cases' diagnosis and classification (see Introduction and Discussion).

**Reviewer 3570593**

**Comment:** *Overall it is a good attempt by the authors. They have mentioned the registered trial ID which is also confirmed. Required to be done:*

- *Please add in the objective of study in the abstract.*

**Answer:** We rephrased the Aim/Objective paragraph in Abstract

- *Key word: “abdominal masses” please check again and add in another one*

**Answer:** We changed that to “abdominal tumors”

- *It is evident that all the patients underwent by being tested by both needles: AN and PC?*

**Answer:** As stated in the Procedures Section, all patients underwent EUS-FNA by means of both needles.

- *Randomization was done for the needle type? When was it applied? The authors need to be very precise, clear and concise in describing the process. It is not very clear.*

**Answer:** Thank you for this comment. Randomization was applied prior to the procedures by a computer generated system in order to determine the order in which each needle was being used. This is stated in the Procedures Section.

- *Histology was attempted in the PC group only, why? No reason mentioned.*

**Answer:** According to the initial design of the study the specimens were processed only for cytological evaluation in the AN group and for cytological or histological evaluation (if applicable) in the PC group. We showed that histology did not add significantly to the overall diagnostic accuracy of PC needle. However, we recognize in the Discussion that the different ways in which the obtained material was processed may represent a technical bias and is definitely a limitation of our study.

- *Secondary outcome measures included material adequacy, number of needle passes, and complications. Complications not mentioned anywhere, if there were not any please report so.*

**Answer:** As stated in multiple positions in the Results Section (see highlighted phrases), no complications were captured with either needle.

- *Dose of propofol administered for sedation – variable recorded but not mentioned elsewhere.*

**Answer:** We added the mean propofol dose (482 mg) in Results Section. Thank you.

- *Sample size assumptions, calculations not mentioned.*

**Answer:** As referred in the Materials and Methods Section, a total of 56 patients were included in the study during the study period. We added the specific sample size assumptions/calculation calculated for the study design. We, additionally, added a study flow chart. Thank you for the comment.

- *Hypothesis for trial not mentioned.*

**Answer:** The hypothesis of the trial is that the novel PC needle is superior in terms of diagnostic accuracy, given its improved characteristics. Therefore, we conducted this comparative trial. This is stated in the last paragraph of the Introduction.

- *Generalizability (external validity, applicability) of the trial findings, please mention keeping in mind the methodology.*

**Answer:** Accordingly, we added a relevant comment in the Discussion Section.

- *Trial flow diagram needs to be incorporated.*

**Answer:** The trial flow diagram has been added (Figure 1).

- *Correct spelling of “Acknowledgement”*

**Answer:** We corrected that accordingly.

- *Table 3a: Indicate hypothesis test applied for the computed p-value.*

**Answer:** We added that accordingly.

- *Table 3b: correct diagnosis is mentioned for 35 for the AN column; though total is cited as 36! Please check.*

**Answer:** We calculated the correct diagnosis rates ONLY in patients in whom adequate for analysis material was obtained. That is the reason why you observe this discrepancy. As stated in the Results Section, inadequate for analysis specimen was obtained overall in 2 patients in the AN group and in 5 patients in the PC group.

- *Table 4: total n is not corresponding to the Sample; 51 cases – no information for 5 cases given.*

**Answer:** Please consider the answer above. Thank you.

- *Table 5: mention authors names in column where Ref 32,33,34... mentioned.*

**Answer:** We corrected that accordingly.

- *Please mention, for example: Judith AB et al instead of Ref 32 and apply for all the rest of references.*

**Answer:** We corrected that accordingly. Thank you.

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