

## **Response to reviewers**

Response to reviewer No. 1799104

First of all, thank you very much for your positive comments, and we totally agree with your constructive suggestions which might be of great help to improve the quality of our manuscript.

This study enrolled 359 achalasia patients of whom 349 patients underwent POEM. Your study pointed out that Ling classification related to duration and inversely related to LESP. How about the contraction amplitude of the esophageal body? Are there any relationship between it and Ling type?

Answer: We retrospectively collected the data of contraction amplitude for all the 359 achalasia patients, however, among whom, only 79 patients had a record of contraction amplitude in our Excel database. Thus, it is a limitation of the present study not illuminating the relationship between contraction amplitude and Ling type.

My 2nd concern is that are there any manometric differences for 21 patients at follow up study? My personal experiences of my patients who

had undergone surgical myotomy disclosed that the LESP decreased but the motility pattern remained the same. I think these manometric finding is compatible to your endoscopic finding. POEM can decrease LESP which leads to cardinal symptom relief for dysphagia.

Answer: We have added the manometric results of the 21 patients in our manuscript (Table 3), and the results were compatible to your viewpoint. Of the 21 patients, 19 had HRM both before and after treatment. The mean preoperative and postoperative LESP's were 34.6 (range, 15.3-59.4) and 15.0 (range, 2.1-21.6), respectively, indicating a statistically significant decrease after POEM. Moreover, we have added these results in (Results, Paragraph 3, Line 6).

There is probably a loss of text in the last 3rd paragraph in discussion section, "Thus, achalasia should undergo POEM as soon as diagnosed, because ----".

Answer: We have completed the sentence "Thus, those with achalasia should undergo POEM soon after diagnosis because of the progressive nature of the disease, which has been confirmed in the previous and the present studies" in (Discussion, Paragraph 5, Line 2).

Beside, don't you think the Ling classification is a specific nomenclature and you should use capital L as a proper noun in grammar?

Answer: We have used Capital L for Ling classification throughout the manuscript.