ANSWERING REVIEWERS

January 24, 2015

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 15333-review.doc).

Title: "Esophageal dysphagia and reflux symptoms before and after oral IQoro^{R} training."

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Name of Journal: *World Journal of Gastroenterology*

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The manuscript has been improved according to the suggestions of reviewers:

1 Format has been updated

2 Revision has been made according to the suggestions of the reviewer

(1) RE 00052339

Thank you for your valuable comments on our article.

1. The length of treatment necessary for improvement likely varies for different patients. We do not claim that the training must last at least 6-months. Improvements had already been recorded in all patients after three months, but a follow-up of results took place after a 6-months training period in accordance with the study design. As stated in the Methods section, the patients were assessed after three months to ensure that they were able to follow the treatment instructions. If no improvement was found at this time, the study would certainly have been interrupted. In conclusion, we can state that even a short period of training, for example in 3-4 months results in a benefit, a profit for the patient.

2. Concerning the relationship between the upper and lower esophageal sphincters, we do not believe that there is a direct, but indirect training connection between the striated muscles in the upper sphincter and around the hiatus in the diaphragm. We are all born with central programs for our vital functions such as breathing and swallowing ability and the mouth is the trigger point for these functions, according to professor Cumhur Ertekin, Department of Neurology, Medical School Hospital, Aegean University, Bornova, Izmir, Turkey. This means that also the diaphragm with hiatus canal, which form parts of the canal for the transport of food from the mouth to the stomach, activated during training with IQoro. When the patient is holding the screen and pulling it forwards, they will simultaneously hold their breath and contract their diaphragm. Indeed, at this moment, a strong pressure increase was recorded using high-resolution manometry in this study.

(2) RE 01716622

Because longstanding symptomatic dysphagia of an esophageal character was one of our main inclusion criteria, radiological esophageal examination was the most appropriate method to exclude any stenotic esophageal lesions. The 12 patients who were examined at an esophageal laboratory had a hernia verified through HRM, and PPI was exposed before the pH measurement.

FEES is of course a method to diagnose food retention in the hypo pharynx but is not a reliable method for diagnosis of wrong way swallowing. We apologize that your suggestions for including endoscopic findings of FEES have not been met.

(3) RE 00057695 Thank you for your valuable comments on our article!

1. The diagnosis of hiatal hernia was only based on radiology in a clinical setting and was mostly performed in the upright position. Adequate radiological examination of hiatal hernia patients must be performed in the recumbent position, preferably with abdominal compression. However, our radiological examination was only performed to exclude any stenosis of benign or malign origin as a cause for the dysphagia, and this examination was performed before entry into the study. All examinations in our study were performed in a routine clinical manner. The inclusion criteria consisted of long-standing symptomatic esophageal dysphagia and reflux symptoms that did not respond adequately to PPI medication. Grade of reflux = 2.0 = moderate in group A (hiatal hernia verified), and in group B (hiatal hernia not verified) 1.4 = between slight and moderate grade of reflux (Table 1). The 12 patients who were examined at an esophageal laboratory had a hernia verified through HRM. This information is now included in the Methods section.

2. All patients had received PPI medication for more than one year (without improvements in reflux or dysphagia symptoms). We did not interfere with the patients' use of this medication, although some patients stopped taking their PPI medication spontaneously. However, in no case was PPI medication started after entry into the study. This information is now included in the Methods section.

3 and 4. The length of treatment necessary for improvement likely varies for different patients. Moreover, to what extent the treatment effect will remain or recur has not been investigated in our study. It is likely that all striated muscles must receive training to some extent to maintain their strength.

5. The method sentences in the introduction have now been moved to the Methods section.

6. Under IQS training, 2nd line: what was meant by "against the horizontal,"? This sentence is now changed to "An oral IQS (Figures 1 and 2) was inserted behind closed lips, and the patient was told to draw it forwards *in a horizontal direction from the lips,* gradually increasing the pulling pressure for 5-10 s while trying to resist the force by tightening the lips.

3. References and typesetting were corrected

Thank you again for publishing our manuscript in the *World Journal of Gastroenterology.*

Sincerely yours,

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