

Relevance of Position and Movement of the Gastroesophageal Junction in Gastroesophageal Reflux Disease: Author's Reply

TO THE EDITOR: I appreciate the interest and comments¹ on our paper, which was published in the July 2013 issue of this journal.² As you have commented, hiatus hernia is an important factor in the pathogenesis of gastroesophageal reflux disease (GERD). Especially, the elderly patients with GERD have high possibility for accompanying hiatus hernia. Our study was performed in 9 patients with GERD and 9 control subjects. The mean age of the enrolled patients and control subjects were 51 and 49 years old, respectively. Most of them were middle-aged. Actually, there were no enrolled subjects with hiatus hernia. Therefore, our study could not evaluate the effect of hiatus hernia in transient lower esophageal sphincter relaxations (TLESRs).

In addition, a novel Hall-effect technique using a magnet is a very useful method to assess the location of the gastroesophageal junction (GEJ).³ However, the method needs the endoscopic fixation of a magnet by using hemoclippling. I think the method is a more invasive procedure compared to the conventional high-resolution manometry (HRM). The purpose of our study was the comparison of parameters on HRM between the patients with GERD and controls without invasive procedures. We could not find difference in the esophageal shortening during incomplete TLESRs between subjects with GERD and normal controls. On the other hand, our method for estimating the location of GEJ on HRM is not possible to measure the real shortening of esophagus during complete TLESRs. This is an important limitation to know the real shortening of esophagus during TLESRs. Because the complete TLESRs are a major etiology of GERD, we have to identify the degree of GEJ lift in the patients with GERD compared to the controls. Maybe the complete TLESRs are a key factor of development of GERD. So, I agree with you and I think that the next step of investigation should include the invasive method to measure esophageal shortening during TLESRs

for closing up the pathophysiology of GERD.

In Asian countries, the prevalence of GERD is increasing in general population.⁴ Even though the newly developed patients have no hiatus hernia, their symptoms and endoscopic findings show typical GERD. We should make efforts to approach the actual pathogenesis of GERD. I recommend larger scaled clinical studies for this purpose. In addition, a lot of focused studies for acid pocket which affects the pathogenesis of GERD are needed. Currently, there is insufficient information for acid pocket regarding their nature and role in the patients with GERD or normal subjects. Further investigation would improve our knowledge for acid pocket in the pathophysiology of GERD.

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