

*Letter to the Editor*

## Gastro-esophageal reflux disease and *H. pylori*: Still a matter of controversy

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To the editor,

We read with interest the paper by Maris et al. concerning acid reflux and esophageal motility after *H. pylori* eradication.<sup>1</sup> We agree that the relationship between *H. pylori* and gastro-esophageal reflux disease (GERD) remains a controversial subject although the majority of studies do not prove a clear association. However, we have several comments and objections concerning the interpretation of the results and conclusions.

Most of the published studies do not show that the presence or eradication of *H. pylori* could affect gastric or esophageal motility (lower esophageal sphincter pressure, esophageal peristalsis and amplitude).<sup>2-4</sup> Maris et al, found that 6 months after *H. pylori* eradication patients had a significant increase of lower esophageal sphincter (LES) pressure (from 11.7 to 12.5 mmHg) and a significant decrease of DeMeester score (from 62.92 to 41.88). They, therefore, suggested that the decrease in esophageal acid exposure was due to LES pressure increase. We think that these data should be interpreted with caution. LES pressure abnormalities is one of the factors involved in GERD pathophysiology.<sup>5</sup> To date, it is well established that transient LES relaxations (TLESR) account for the majority of reflux episodes (up to 70%).<sup>6</sup> Low resting LES pressure is also associated with pathological reflux but the sphincter is considered defective when pressure is  $\leq 6$  mmHg.<sup>7</sup> Thus, it is unlikely that a small increase of LES, although marginally statistically significant, within normal values would be of clinical significance. We have to note that the authors do not report normal values of LES of their labo-

ratory and in methods it is not reported how they measure the pressure, but values well above 10 mmHg are usually within normal range. In addition, it is not stated whether *H. pylori* eradication had any effect on esophageal amplitude or peristalsis which are two important components of esophageal motility. Regarding the effect of gastrin on LES pressure, data in the literature are contradictory. Nevertheless, Tanaka et al found no association between change in serum gastrin and LES pressure and TLESR as well, after *H. pylori* eradication.<sup>2</sup> Monkemuller et al concluded that serum gastrin did not correlate with severity of GERD.<sup>8</sup>

We encourage studies managing to perform esophageal physiological studies (both 24-h pH study and manometry) in patients twice, but we believe that patients in the study by Maris et al. had significant improvement in reflux parameters after *H. pylori* eradication not because of LES pressure increase but because of decrease of gastric acid secretion since they had antral predominant gastritis.

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