Does Helicobacter pylori eradication or proton pump inhibitor use benefit gastroesophageal reflux disease?

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We read with great interest the recently published article by Moschos *et al* [1]. They aimed to show the beneficial effect of *Helicobacter pylori* (*Hp*) eradication in gastroesophageal reflux disease (GERD) patients. They indicated in this study that *Hp* eradication may positively influence GERD symptoms. We commend Moschos *et al* for this study, but we think there are some controversial situations that need to be clarified.

They indicated that they found improvement in manometric pattern at 17% of patients and acid reduction in 3-h pH results at 82.8% of patients. But there are controversies of this procedure. Firstly, weak acid and non-acid reflux were not mentioned in this study. Ambulatory pH monitoring shows only acid reflux, and multichannel intraluminal 24-h pH-impedance (MII-pH) monitoring is needed to determine weak and non-acid reflux [2]. Thus, we think that to determine the exact beneficial results of *Hp* eradication, MII-pH monitoring may be done. Secondly, it has been shown that the intragastric and esophageal pH levels are affected postprandial according to the meal composition and mealtime. High-fat meals have been shown to elicit heartburn and increased acid exposure [3]; however, in this study, the patients' meal composition and type were not mentioned.

And thirdly, it is controversial whether the beneficial effect stems from proton pump inhibitor (PPI) use or from *Hp* eradication treatment. It is shown that PPI therapy aims to reduce the acidity of reflux episodes and conversely increases the exposure of the esophagus to non-acid and weakly acidic

reflux [4]. Consistent with this study, Rinsma *et al* [5] showed improvement in distal baseline impedance and decrease in acid reflux in MII-pH monitoring, but they found an increase in non-acid reflux episodes in patients receiving PPIs after 6 months of therapy. In this study, the patients had taken rabeprazole for 10 days to eradicate *Hp*, followed by high-dose PPIs (4 times a day) for 30 days. Although there seems to be a 6-week without treatment period, it is a high acid suppressive dose that may affect acid secretion. Thus, we think that the beneficial effect observed during pH monitoring may be due to the long-term effect of PPI treatment. Based on the abovementioned data, we suggest that these controversies must be taken into account in future studies.

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