A potential impact of Helicobacter pylori–related metabolic syndrome on early and long-term outcomes of bariatric surgery

To the Editor:

Alqahtani et al1 concluded that Saudi Arabian patients with metabolic syndrome–related parameters who undergo bariatric surgery show comparable features regarding the early and 3-year outcomes after endoscopic gastroplasty (EG) and laparoscopic sleeve gastrectomy (LSG).

Helicobacter pylori (H pylori)–related metabolic syndrome appears to be a predictor of post-LSG and/or post-EG early and long-term outcomes, especially in populations with a high prevalence of H pylori infection, including Saudi Arabsians.2,3

Specifically, H pylori infection is very common, with a mean worldwide prevalence of 58%, partly owing to immigrants coming from regions with a high prevalence of H pylori infection.2 Approximately 4.4 billion individuals are infected with H pylori,2 and H pylori infection–related metabolic syndrome is hyperendemic in Saudi Arabia, with a prevalence >80%.5 In particular, studies from Saudi Arabia have reported an H pylori infection prevalence rate of 88% among morbidly obese patients who underwent esophagogastro-duodenoscopy (EGD) before bariatric surgery.

Moreover, the occurrence of H pylori–related metabolic syndrome may exert an impact on bariatric surgery outcomes, such as on body weight loss and homeostasis of glucose.6 H pylori infection is considerably linked with postoperative adverse events after LSG;5 and preoperative EGD in Saudi obese patients is mandatory to recognize concerns such as H pylori infection that could modify, delay, or postpone the bariatric procedures, including LSG/EG.6 Likewise, our studies7 indicate higher rates of premalignant pathologic changes in the gastric mucosa (eg, atrophic gastritis and intestinal metaplasia) and also of metabolic syndrome–related parameters, including insulin resistance and arterial hypertension, in patients with active H pylori infection. Furthermore, bariatric patients with metabolic syndrome–related H pylori infection might be vulnerable to gastroesophageal reflux disease (GERD) development8 and H pylori with metabolic syndrome–related GERD or Barrett’s esophagus/esophageal adenocarcinoma sequence in certain subpopulations.9 Therefore, preoperative H pylori eradication may decrease the early and long-term outcomes of LSG and/or EG. H pylori eradication may improve metabolic syndrome–related insulin resistance and arterial hypertension in the early and long term after LSG/EG,2,10 whereas persistent H pylori infection after LSG or EG might deteriorate such aforementioned metabolic syndrome–related components. Thus, further large-scale prospective controlled studies are warranted.

DISCLOSURE

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5. Alqahtani et al1 concluded that Saudi Arabian patients with metabolic syndrome–related parameters who undergo bariatric surgery show comparable features regarding the early and 3-year outcomes after endoscopic gastroplasty (EG) and laparoscopic sleeve gastrectomy (LSG).

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