LETTER TO THE EDITOR

Helicobacter pylori, obesity and gastro-oesophageal reflux disease: is there a relation?

In a recent issue of this Journal, Loffeld[1] concluded that there is a definite relation between body mass index (BMI) and the occurrence of gastro-oesophageal reflux disease (GERD). He also discussed the relation between obesity, GERD, and Helicobacter pylori. The exact relation and the consequences are not yet entirely clear.

As Loffeld describes, the most important pathophysiological mechanism causing reflux is long-lasting spontaneous relaxation of the lower oesophageal sphincter (LOS) or low pressure in the LOS. A hiatal hernia is an additional risk factor. Finally, increased intra-abdominal pressure plays an important role in the mechanism of reflux. Since these factors are generally accepted to be present in patients with obesity, these patients are expected to be at risk to develop GERD.

We studied the association between BMI and hiatal hernia or GERD in patients with morbid obesity. We retrospectively analysed the preoperative data of 198 morbidly obese patients (BMI >40 kg/m², or BMI >35 kg/m² in combination with relevant comorbidity) treated by gastric banding from March 1995 to December 2000. Data of the extensive preoperative protocol were analysed for BMI, symptoms of GERD, use of PPI or H2 blockers, and result of gastroscopy. Endoscopy was performed in 170 patients (157 females, 13 males; age 37 years, range 20 to 69 years; BMI 44.9 kg/m², range 35.6 to 60.9 kg/m²). GERD symptoms were reported in 50 patients (29.4%), eight of them were treated by PPI or H2 blockers. Hiatal hernias (HH) were seen in 81 patients (47.6%) and symptomatic in 30 (37.0%). Of patients without HH, 27.6% reported symptoms of GERD. Endoscopic signs of reflux oesophagitis were present in 61.7% of patients with HH, vs 12.4% in those without (p<0.001). BMI in patients with and without GERD symptoms was not different (44.9±5.2 kg/m² vs 45.0±5.8 kg/m²).

We concluded that in morbidly obese patients GERD symptoms occur independently of BMI, but are related to the presence of HH. Nevertheless, based on our findings, overweight can not be excluded as a risk factor for GERD, since we did not compare our morbidly obese population with the general population. However, it seems that being obese and getting more obese does not increase the risk of developing GERD. Treatment of GERD in morbidly obese patients is medical.

However, treatment of obesity and especially surgical treatment of morbid obesity is relevant. The number of patients with obesity is growing and will give rise to serious health problems, such as diabetes, hyperlipidaemia, hypertension, and obstructive sleep apnoea.[2-4] Recent follow-up studies have demonstrated that bariatric surgery resulted in long-term weight loss, and an improved lifestyle. Furthermore a substantial majority of patients with diabetes, hyperlipidaemia, hypertension, and obstructive sleep apnoea experienced complete resolution or improvement.[3-5]

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REFERENCES

1. Loffeld RJ. Helicobacter pylori, obesity and gastro-oesophageal reflux disease. Is there a relation? A personal view. Neth J Med 2005;63(9):344-7.

2. Van Houwelingen KG, van Uffelen R, van Vliet ACM. The sleep apnoea syndromes. Review article. Eur Heart J 1999;20:858-66.

3. Buchwald H, Avidor Y, Braunwald E, et al. Bariatric surgery. A systematic review and meta-analysis. JAMA 2004;292:1724-37.

4. Sjöström L, Lindroos A-K, Peltonen M, et al. Lifestyle, diabetes, and cardiovascular risk factors 10 years after bariatric surgery. N Engl J Med 2004;351:2683-93.

5. Pontiroli AE, Folli F, Paganelli P, et al. Laparoscopic gastric banding prevents type 2 diabetes and arterial hypertension and induces their remission in morbid obesity. A 4-year case-controlled study. Diabetes Care 2005;28:2703-9.