Original Article

Impact of concomitant laparoscopic sleeve gastrectomy and hiatal hernia repair on gastro-oesophageal reflux disease in morbidly obese patients

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Abstract

BACKGROUND: The aim of this study was to analyse the impact of hiatal hernia repair (HHR) on gastro-oesophageal reflux disease (GERD) in morbidly obese patients with hiatus hernia undergoing laparoscopic sleeve gastrectomy (LSG). **MATERIALS AND METHODS:** It is a retrospective study involving ten morbidly obese patients with large hiatus hernia diagnosed on pre-operative endoscopy who underwent LSG and simultaneous HHR. The patients were assessed for symptoms of GERD using a Severity symptom score (SS) questionnaire and anti-reflux medications. **RESULTS:** Of the ten patients, five patients had GERD preoperatively. At the mean follow-up of 11.70 ± 6.07 months after surgery, four patients (80%) showed complete resolution while one patient complained of persistence of symptoms. Endoscopy in this patient revealed resolution of esophagitis indicating that the persistent symptoms were not attributable to reflux. The other five patients without GERD remained free of any symptom attributable to GERD. Thus, in all ten patients, repair of hiatal hernia (HH) during LSG led to either resolution of GERD or prevented any new onset symptom related to GER. **CONCLUSION:** In morbidly obese patients with HH with or without GERD undergoing LSG, repair of the hiatus hernia helps in amelioration of GERD and prevents any new onset GER. Thus, the presence of HH should not be considered as a contraindication for LSG.

Key words: Gastro-oesophageal reflux, hiatus hernia, sleeve gastrectomy

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INTRODUCTION

Obesity is associated with multiple comorbidities including diabetes mellitus, hypertension, obstructive sleep apnoea and gastro-oesophageal reflux disease (GERD). Hiatal hernia (HH) and GERD are closely related.[1] Obesity is known to be an independent risk factor for the development of both GERD and HH.[2] HH is present in about 37%–50% of morbidly obese patients undergoing bariatric surgery[3-5] while 50%–70% of the patients undergoing this surgery have symptomatic reflux.[6,7] Laparoscopic anti-reflux surgery with HH repair (HHR) is generally the standard of care for the management of GERD. However, in morbidly obese patients with HH and/or GERD, bariatric surgery is the preferred treatment modality.[8-10] Laparoscopic roux-en-y bypass (LRYGB) with or without crural closure is known to improve GERD and HH.[11-16]

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