Pre-operative *H. pylori* screening and treatment in patients undergoing laparoscopic sleeve gastrectomy

Adam Di Palma\(^1\), Sultan Alhabdan\(^1\), Azusa Maeda\(^1\), Runjan Chetty\(^2\), Stefano Serra\(^2\), Fayez Quereshy\(^1\), Timothy Jackson\(^1\), Allan Okrainec\(^1\)

\(^1\)Division of General Surgery, UHN, \(^2\)Department of Pathology, UHN

INTRODUCTION

*H. pylori* (HP) infection has been linked to increased marginal ulceration in Roux-en-Y gastric bypass. However, the role of screening and pre-operative treatment of HP in asymptomatic patients undergoing laparoscopic sleeve gastrectomy (LSG) remains unclear. The aim of this study was to define the prevalence of HP, pre-operative screening and treatment practices and post-operative outcomes in patients undergoing LSG.

METHODS

All LSG cases at an academic centre in Toronto, Ontario between 2010 and 2017 were reviewed. Baseline data including HP screening, diagnosis, treatment and confirmation of eradication as well as post-operative outcomes were obtained from our institutional database. Surgical specimens were analyzed for presence of HP by histopathological assessment and/or immunohistochemistry.

RESULTS

A total of 222 patients were identified (80.2% female, mean age 48.1 years, mean BMI 51.2). Pre-operative HP screening (by biopsy, serology or urea breath test) was identified in 90% of patients. Of these, 18% tested positive for HP and 15% were treated. Pre-operative confirmation of eradication was obtained in 90% of HP-treated patients. Seven surgical specimens were HP-positive (3.2%) including 5 which had undergone pre-operative treatment. No significant differences were noted in post-operative complications at 1 year regardless of pre-operative HP status, treatment, confirmation of eradication or presence of HP in the surgical specimen.

CONCLUSIONS

Pre-operative screening and treatment likely reduce the prevalence of HP in surgical specimens following LSG. This, however, does not seem to influence surgical morbidity at one year. Pre-operative HP screening and treatment seem to be of limited clinical value in asymptomatic patients undergoing LSG.