

CHARACTERISTICS OF BENIGN GASTRIC ULCERS IN A SAMPLE OF PATIENTS WITH DYSPEPTIC SYMPTOMS

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Early studies following the discovery of *Helicobacter pylori* bacterium have indicated a 50 to 75% prevalence of *H. pylori* infection in benign gastric ulcers. However, with the declining prevalence of *H. pylori* infection, more recent studies have indicated that the association between *H. pylori* infection and peptic ulcer disease is not as strong as indicated in previous literature. On the other hand the incidence of non-steroidal anti-inflammatory drugs (NSAIDs) related and non-NSAID non-*H. pylori* ulcers are rising. Literature review did not reveal any recent studies conducted in Sri Lanka to investigate the prevalence of *H. pylori* in benign gastric ulcers. The aim of this study is to document the pathological features of benign gastric ulcers and to investigate the prevalence of *H. pylori* infection in a sample of patients with benign gastric ulcers presenting with dyspeptic symptoms.

This was a cross sectional study of 656 patients with dyspeptic symptoms who were undergoing upper gastrointestinal endoscopy from March 2012 to August 2013, at Teaching Hospital, Peradeniya. Endoscopic biopsies were obtained from the ulcer edge, antrum, incisura angularis and the body from each patient detected to have a benign gastric ulcer. One minute rapid urease test, histology based haematoxylin and eosin stain, toluidine blue stain and immunohistochemistry were performed as *H. pylori* detection methods. Positivity with two or more of these tests was regarded as evidence of *H. pylori* infection.

Fifty nine (9%) subjects were detected with benign gastric ulcers, 56 in the antrum and 3 in the proximal stomach. The mean age of the patients with ulcers was 62 years \pm 14.2 (range 22 to 89 years) and 35 (59.3%) were males. Only one (1.7%) subject had *H. pylori* gastritis. Histologically, of the *H. pylori* negative cases, 42 (72.4%) did not have any inflammation.

This study demonstrates that the prevalence of *H. pylori* associated gastric ulcers is extremely low in this population and therefore, it is likely that most benign gastric ulcers in our population are of non *H. pylori* aetiology. Due to absence of inflammation in the surrounding mucosa in most, the possibility of gastropathy associated ulcers should also be considered.

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