

Should Gastroesophageal Reflux Disease Be a Screening Factor for Helicobacter Pylori in Patients from Endemic Regions?

**Ahmed Ahmed, Ian Yu, Vanessa Brown, Amjad Sheikh, Alejandro Silva, Mirela Feurdean, Suzanne Atkin
Department of Medicine, Rutgers, New Jersey Medical School**

Introduction:

Helicobacter pylori (HP) is a common gastric infection with the highest prevalence in Asia, Africa, Central/South America as well as in U.S. immigrants from these areas. Current American College of Gastroenterology (ACG) guidelines recommend screening for HP in cases such as patients with active or prior peptic ulcer disease (PUD). Screening is not recommended for patients who exhibit only symptoms of gastroesophageal reflux disease (GERD) irrespective of regional origin. The goal of this study was to determine if patients from endemic regions with GERD should be screened for HP.

Methods:

This was a retrospective chart review of patients who presented to the Ambulatory Care Clinic in 2019 with symptoms of GERD and/or PUD for whom orders were placed for HP testing via stool antigen or endoscopic biopsy. GERD symptoms were defined as reflux or heartburn and PUD as any symptom of dyspepsia. Patients were stratified by symptoms: GERD, PUD, or both. Exclusion criteria: tests ordered but never collected, orders for confirmation of cure for prior infection, tests of the same patient, tested patients with no symptoms. Enrolled patients were further stratified by region of origin.

Results:

389 patients that met the selection criteria were included in this study. 58.1% of all patients were positive for HP. Of those that were positive, 93.4% came from an endemic area and of these 43.1% had PUD symptoms, 15.2% (32/211) had GERD only, and 36.5% had both GERD and PUD symptoms. Of HP positive patients from non-endemic areas, 13.3% (2/15) had GERD symptoms, 33.3% had PUD only, and 40% had both PUD and GERD.

Discussion

There was no statistically significant difference in GERD and HP based on endemic origin. Though this suggests GERD shouldn't be used as a screening tool, our data collection was small and skewed towards patients originating from endemic regions of the Americas, and because of significant noncompliance rates for tests. Further larger studies are needed to establish appropriate screening recommendations.

Tables and Figures

H. Pylori Status and Symptoms	Originates from Endemic Area? No	Originates from Endemic Area? Yes	Total
H. Pylori Negative	21	142	163
GERD Only	7	32	39
PUD	10	97	107
without GERD	6	55	61
with GERD	4	42	46
H. Pylori Positive	15	211	226
GERD Only	2	32	34
PUD	11	168	179
without GERD	5	91	96
with GERD	6	77	83
Total	36	353	389