

“PREVALENCE OF HELICOBACTER PYLORI IN BIOPSIED PATIENTS WITH DYSPEPSIA AND GERD: A RETROSPECTIVE INSIGHT”

Fazal Manan¹, Muhammad Umair^{1,2}, Shaheer Alam^{1,2}, Ayesha

Ibrar^{1,2}, Shafaq Faheem^{1,3}, Talia Azad¹

1.Department of Gastroenterology, Shifa International Hospital, Islamabad

2.Nowshera Medical College, Nowshera

3.Federal Medical College, Islamabad

muhammadumairicp@gmail.com



Introduction

- Helicobacter pylori (H. pylori) is a flagellated, gram-negative bacillus, with infectivity rates reported as high as 80–90% in some regions.
- Dyspepsia is characterized by epigastric pain, burning, early satiety, or postprandial fullness.
- Gastroesophageal reflux disease (GERD) occurs when stomach contents reflux into the esophagus.
- H. pylori infection can cause gastric ulcer, duodenal ulcer, and even a serious condition like gastric carcinoma.**
- Esophagogastroduodenoscopy (EGD) is the gold standard diagnostic modality for H. pylori, with a specificity of >95%.

Results

- A total of 436 patients were included with a mean age of 44 ± 14.56 years.
- Histopathological analysis showed that 183 patients (42%) were positive for H. pylori, while 253 patients (58%) were negative.
- There was no significant association between gender and age of patients and their histopathological results.
- H. pylori positivity was higher (n=125) in patients with mild gastritis, followed by moderate (n=48) and then severe (n=9). Only 1 patient was positive for H. Pylori with normal gastric mucosa.
- The Cochran-Mantel Haenszel test revealed a statistically significant association between endoscopic findings and histopathological findings, indicating a 38.3% increase in odds of positive H. Pylori results for every one-unit increase in the severity of gastritis.

Conclusion

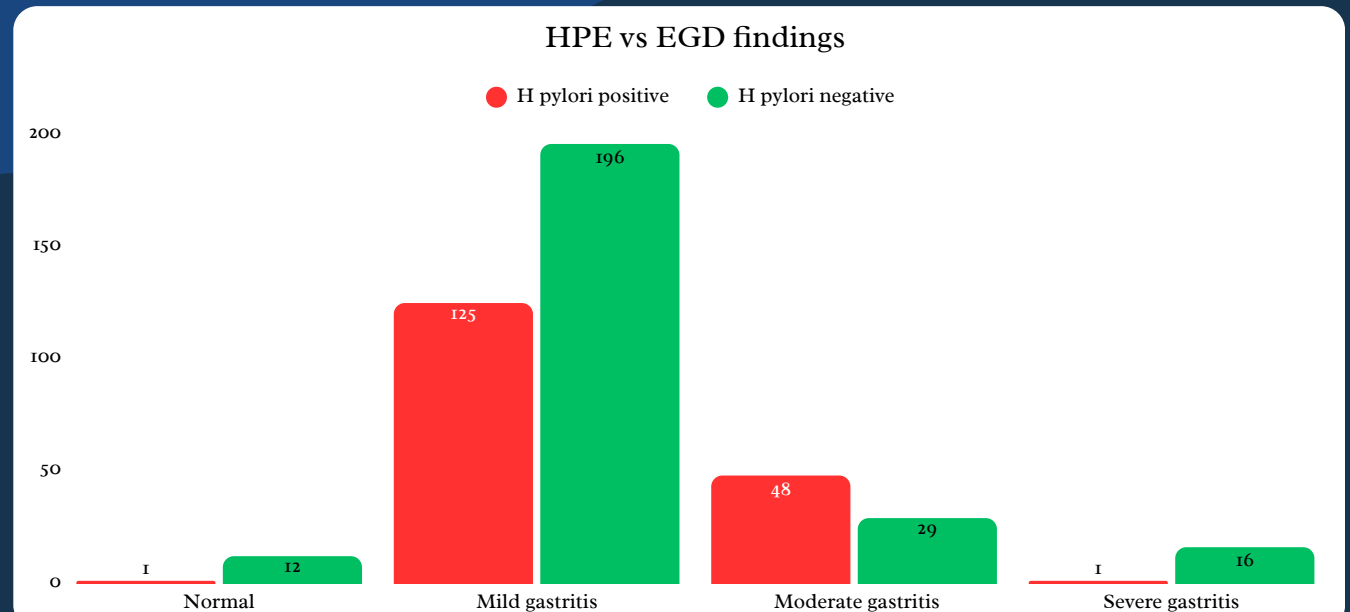
The Severity of gastritis positively affects the histopathological testing for H. Pylori. This signifies the importance of endoscopic grading and routine biopsy in moderate to severe gastritis patients for better diagnosis of H. pylori infections.

Methodology

- Ethical approval obtained from IRB of SIH
- EGD data of patients with GERD and dyspepsia, along with their histopathological reports, were obtained for the period January to June, 2025.
- A total of 436 patients were included using Universal sampling.
- Data was analyzed using SPSS v26
- Chi-square test was applied, and a p-value of ≤ 0.05 was considered significant.

Rationale

To assess the prevalence and correlation of H. pylori infection in chronic dyspepsia and GERD patients undergoing EGD at SIH.



Discussion

- 42% patients were positive for H pylori.
- When compared to a study at the same center in 2008, the prevalence has decreased from previously being 88.3%.
- A more severe endoscopic appearance of gastritis is suggestive of H. Pylori positivity, emphasizing the importance of endoscopic grading.
- This supports the option of routine biopsy in moderate and severe gastritis patients, in areas with a high burden of H. Pylori.

References

- Sun Q, Yuan C, Zhou S, et al. Helicobacter pylori infection: a dynamic process from diagnosis to treatment. Front Cell Infect Microbiol. 2023;13:1257817. Published 2023 Oct 19. doi:10.3389/fcimb.2023.1257817
- Tack J, Talley NJ, Camilleri M, et al. Functional gastroduodenal disorders. Gastroenterology. 2006;130(5):1466-1479. doi:10.1053/j.gastro.2005.11.059
- Gastroesophageal reflux disease: MedlinePlus 1. Sharndama HC, Mba IE. Helicobacter pylori: an up-to-date overview on the virulence and pathogenesis mechanisms. Braz J Microbiol. 2022;53(1):33-50. doi:10.1007/s42770-021-00675-0
- Medical Encyclopedia [Internet]. Available from: <https://medlineplus.gov/ency/article/000265.htm>
- Huh CW, Kim BW. Korean J Gastroenterol. 2018;72(5):229-236. doi:10.4166/kjg.2018.72.5.229
- Helicobacter pylori prevalence and histopathological findings in dyspeptic patients. PubMed. <https://pubmed.ncbi.nlm.nih.gov/25603673/>. Published June 1, 201