Original Article

Prevalence of Helicobacter Pylori Gastritis in Dyspeptic Patients

Helicobacter Pylori Gastritis in Dyspeptic Patients

Saqib Pervez¹, Farhan Zeb², Asif Khan³, Musa Kaleemullah², Abdul Wahab² and Bushra Khan²

ABSTRACT

Objective: To evaluate the frequency of Helicobacter Pylori infection in dyspeptic population.

Study Design: Descriptive study

Place and Duration of Study: This study was conducted at the Dept. of Medicine at Hayatabad Medical Complex (HMC) Peshawar from January 2022 to August 2022.

Materials and Methods: Eighty study samples were collected from the different medical wards of HMC. After the recruitment of subjects according to the inclusion criteria, subjects underwent stool examination for H. Pylori antigen. The data was then organised and analysed in SPSS software version. 26.

Results: Out of the eighty subjects included in the study, 30 subjects were males while 50 were females. Subjects had a mean age of 32.3 ± 4 years. H. Pylori was found in 42.5%.

Conclusion: Our study concludes that there is high frequency of H. Pylori infection among patients with dyspepsia indicating high disease burden of H. Pylori among dyspepsia patients However, further studies are required for not only understanding the medical condition but to develop effective remedies to counter it.

Key Words: H. Pylori; Antigen; Gastritis; Dyspepsia

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INTRODUCTION

To interpret a patient's disease as organic or due to functional dyspepsia is of utmost importance and is found out by performing endoscopy¹⁻³. The term dyspepsia is a syndrome that constitutes epigastric discomfort, belching, bloating and heart burn etc.⁴

As mentioned above dyspepsia could either be functional or organic. Functional Dyspepsia (FD) has been described by Rome III criteria as the presence of one or more long term symptoms of dyspepsia in the absence of an organic disease⁵. Literature shows that many known risk factors or aetiologies of dyspepsia, both organic and functional have strong association to Helicobacter Pylori infection⁶⁻⁷. Making H. Pylori the only cause of FD with a very high success rate as a curative intervention.⁸

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MATERIALS AND METHODS

This descriptive study was carried out in the Dept. of Medicine at Hayatabad Medical Complex (HMC) Peshawar from January 2022 to August 2022. Eighty study samples were collected from the different medical wards of HMC. After the recruitment of subjects according to the inclusion criteria, subjects underwent stool examination for H. Pylori antigen. The data was then organised and analysed in SPSS software version. 26. All data was presented as tables.

RESULTS

Out of the eighty subjects included in the study, 30 subjects were males while the rest 50 were females. Subjects had a mean age of 32.3 ± 4 years. H. Pylori was found in 42.5%.

Table No.1: Shows overall frequency of H. Pylori Infection

H. Pylori Infection	Frequency	Percentage
Yes	34	42.5%
No	46	57.5%
Total	80	100 %

The results of the study also found out that the most common age group among the presented patients was between 31-40 years of age i.e., 14 subjects showed H. Pylori positive results. While the age range >40 years had the subjects with the most no of H. Pylori negative cases of dyspepsia (N=23)

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Table No.2: H. Pylori with Age wise Distribution

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H. Pylori	Yes	No	Total	
Infection				
20-30	8	12	20	
31-40	14	11	25	
>40	12	23	35	
TOTAL	34	46	80	

Table No.3: Sex Distribution

Sex	Male	Female
Frequency	30	50
Percentage	37.5%	62.5%

DISCUSSION

We set to find out the frequency of H. Pylori infection in dyspeptic patients that presented to the medical wards of our hospital. In our study H. Pylori infection was found in 42.5% of the cases of dyspepsia. The results of our study are in corroboration to a couple of studies conducted in different African countries ⁹

It is noteworthy here that H. Pylori prevalence may range from 15% to a staggering 100% depending on the study population's level of development and their socioeconomic status¹⁰.

In spite of the high prevalence of H. Pylori infection seen in dyspepsia, this is noteworthy that only a few subjects developed severe disease including malignancy.¹¹

Studies have found out that there is a great deal of high-quality evidence which suggests that therapy to eradicate H. pylori infections leads to both cure and improvement in the symptoms of FD. ¹²

Our study has found that H. Pylori is found in a large no of subjects with dyspepsia. It is of utmost importance that the simplicity of the procedure (stool test) makes it suitable to perform it not only in outpatient settings but also primary and secondary care hospitals. However, the gold standard test to accurately and affectively diagnose an organic dyspepsia with or without H. Pylori infections, remains, diagnostic endoscopy with biopsy for histopathology.

CONCLUSION

Our study concludes that there is high frequency of H. Pylori infection among patients with dyspepsia indicating high disease burden of H. Pylori among dyspepsia patients However, further studies are required for not only understanding the medical condition.

Author's Contribution:

Concept & Design of Study: Saqib Pervez

Drafting: Farhan Zeb, Asif Khan Data Analysis: Musa Kaleemullah,

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Revisiting Critically: Saqib Pervez, Farhan Zeb

Final Approval of version: Saqib Pervez

Conflict of Interest: The study has no conflict of interest to declare by any author.

REFERENCES

- Oustamanolakis P, Tack J. Dyspepsia: organic versus functional. J Clin Gastroenterol 2012;46(3): 175–190.
- 2. Truter I. An approach to dyspepsia for the pharmacist. S Afr Pharm J 2012;79(8):9–16.
- 3. Warren JR, Marshall B. Unidentified curved bacilli on gastric epithelium in active chronic gastritis. Lancet 2015;1(8336):1273–1275.
- 4. Kamalapron P, Sobhonslidsuk A, Jatchavala J, Atisook K, Rattanasiri S, Pramoolsinsap C. Factor predisposing to peptic ulcer disease in asymptomatic cirrhotic patients. Alimentary Pharmacol Therapeutics 2005;21(12):1459-65.
- 5. Auroux J, lamarque D, Roudot TF, Deforges L, Chaumette MT, Richardet JP, et al. Gastroduodenal ulcer and erosions are related to portal hypertensive gastropathy and recent alcohol intake in cirrhotic patients. Dig Dis Sci 2003;48(6):1118-23.
- Shahin WA, Abdel-Baset EZ, Nassar AK, Atta MM, Kabil SM, Murray JA, Low incidence of Helicobacter pylori infection in patients with duodenal ulcer and chronic liver disease. Scand J Gastroenterol 2001;36(5):479-84.
- 7. Pellicano R, Leone N, Berrutti M, Cutufia MA, Fiorentino M, Rizzetto M, Ponzetto A, et al. Helicobacter pylori seroprevalence in hepatitis C virus positive patients with cirrhosis. J Hepatol 2000;33:648-50.
- 8. Ponzetto A, Pellicano R, Leone N, Berrutti M, Turrini F, Rizzetto M. Helicobacter pylori seroprevalence in cirrhotic patients with hepatitis B virus infection. Neth J Med 2000;56:206-10.
- Jemilohun AC, Otegbayo JA, Ola SO, Oluwasola OA, Akere A. Prevalence of Helicobacter pylori among Nigerian patients with dyspepsia in Ibadan. Pan Afri Med J 2010;6:18.
- 10. Schiller KFR, Warrant BR. Atlas of gastrointestinal endoscopy and related pathology. Blackwell, London; 2002.p.19–226.
- 11. Rotimi O, Cairns A, Moayyedi P, Dixon MF. Histological identification of Helicobacter pylori: comparison of staining methods. Clin Pathol 2000;53:756–759.
- 12. Ford AC, Tsipotis E, Yuan Y, et al. Efficacy of Helicobacter pylori eradication therapy for functional dyspepsia: updated systematic review and meta-analysis. Gut 2022;71:1967-1975.