Helicobacter Pylori Prevalence and Eradication (HAPPEN) Study: Helicobacter Pylori Prevalence: An experience with patients presenting to Jinnah Hospital, Lahore

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We conducted Helicobacter pylori prevalence and eradication study, (Happen) study at Jinnah Hospital Lahore. We report prevalence of H Pylori in patients presenting for upper gastrointestinal endoscopy at Department of GI endoscopy Jinnah Hospital Lahore. 78 patients aged 20-80 years 40 males and 38 females were evaluated. In each patient two antral biopsies were taken for histopathlogy reported by a single experienced pathologist. Endoscopic findings included gastritis in 42 patients duodenal ulcers in 07 and normal report in 10 miscellaneous diagnosis in 19 patients. Positive identification of helicobacter pylori on histology was possible in 34 patients i.e. 43.6%. In gastritis patients histology was positive in 24 cases, and in non-gastritis patients it was positive in 10. In gastritis patients compared to non gastritis patients H.Pylori prevalence was not statistically different. Key words: Helicobacter Pylori, endoscopy, treatment of.

Helicobacter pylori has been dubbed as "BUG" of the decade. It is prevalent in all populations in varying frequencies. H. Pylori discovery has revolutionized the treatment of dyspeptic patients with ulcer disease¹. It is now traditional to name acid peptic disease as acid pylori disease. The prevalence ranges from 30% to 70% in dyspeptic patients^{2,3,4,5}.

The prevalence in healthy volunteers in Germany is about 40% and in duodenal ulcer 100%. Histopathology is the gold standard investigation in detection of H pylori⁷. We report prevalence in 78 consecutive patients presenting for upper GI endoscopy at Jinnah Hospital, Lahore, using histopathology as a method for H pylori detection.

Subjects and methods:

Seventy-eight consecutive patients presenting for upper GI endoscopy at Jinnah Hospital Lahore for different reasons were recruited. The mean age was 36 years range 20-80 years. There were 40 males and 38 females, of those 16 were smokers. The presenting complaints are given in Table 1.

Table 1 Presenting Complaint

	Frequency	%age
Valid		
Epigastric pain	46	59
Retrosternal discomfort	12	15.4
Dyspepsia	8	10.3
Hematemesis	4	5.1
Malena	4	5.1
Vomiting	3	3.8
Abdominal distension		
Total	78	100

Informed consent was obtained from all patients every patient underwent diagnostic upper GI endoscopy. The endoscopic findings are given in Table 2.

	Frequency	%age
Valid		
Antral	14	17.9
Gastritis		
Linear		
Erosions1	1.3	
Mild gastritis	14	17.9
Severe gastritis	11	14.1
Duodenitis	2	2.6
Reflux oesophagitis	8	10.3
Varices	6	7.7
Hiatus hernia	1	1.3
Normal findings	10	12.8
Oesophageal candidiasis	1	1.3
Ulcers	7	9.0
Friable mucosa	1	1.3
Ca stomach	1	1.3
Peutz jaeger syndrome	1	1.3
Total	78	100

All patients had 03 antral biopsies two for histopathology by hematoxylin and Eosin Stain and Giemsa stain and one for urea broth test (results published elsewhere). histopathology was reported by a single experienced pathologist who was blinded of symptoms and upper GI endoscopy findings.

The histopathology findings in these patients are given in Table III.

Table III Histopathology

	Frequency	%age	Valid %age	Cumulative percent
Valid Positive	34	43.6	43.6	43.6
Negative	44	56.4	56.4	100.0
Total	78	100.0	100.0	
Total	78	100.0		

There was no statistical difference in patients who had gastritis on endoscopy when compared with rest the results are given in table IV.

Table 4 Cross tabs gastritis * Histopathology Crosstabulation Count

	Histopathology		Total
	Positive	Negative	
Gastritis			
Yes	24	18	42
No	10	26	36
Total	34	44	78

Chi-Square Tests

	Value	Df	Asymp. Sig.(2-sided)
Pearson Chi-Square	6.798 b	1	.009

Discussion

This study HAPPEN has shown that prevalence of Helicobacter pylori is less than anticipated. The major reason for low fingers is the fact that our patients might have had different medications including ulcer therapy and antibiotics. Although we did exclude patients who had received Helicobacter pylori eradication regimen in last one year.

A significant reduction has previously been reported in subjects classified as antibiotic users and nonusers⁸ and similarly statistically significant differences were noted in frequency of current infection or even seropositivity in group who used H2 RA and PPI's⁸ when compared with non users. In our study positive histopathology for H. Pylori was reported amongst all but 1 patients with duodenal ulcer which also suggest that the biopsies obtained were adequate and the reporting pathologist who was blinded of endoscopic finding was of high standard.

References

- Colri Jones DG, Bloom B, Bodemar G, et al. Management of dyspepsia: Report of a working party. Lancet 1988; 1: 576-9.
- Lambert JR, Dunn K, Borromeo M. Compylobacter pylori a role in non-ulcer dyspepsia? Scand J Gastroenterol (Suppl) 1989; 160:7-13
- Rokkas T, Pursey C, Uzoechina E, et al. Compaylobacter pylori and non-ulcer dyspepsia. Am J Gastroenterol 1987;82:1149-52.
- Greenberg RE, Bank S. The prevalence of Helicobacter pylori in nonulcer dyspepsia. Arch Intern Med 1990; 150:2053-5.
- O" Morain C, Gilvarry J. Eradication of Helicobacter pylori in patients with non-ulcer dyspepsia. Scand J Gastroenterol (suppl) 1993; 28: 30-3.
- Gerald Holtmama, Nicerolas J. Telly, et al. Antibody response to specific H. Pylori antigens in functional dyspepsia, duodenal ulcer disease health. Am J. Gastroentrol – Vol. 93. No. 8, 1998. 1222-27.
- W-D Chey, U.K. Murthy et al. The Chembrak H. P. chek whole blood serology test for the detection of helecobacter pylori infection. Am J Gastroenterol – Vol. 93. No. 1 1998, 10-19.
- Gurinder K-Luthra, Anteromy R-O' et al. Comparison of biopsy and serological methods of diagnosis of helicobacter pylori infection and patient at role of antibodies. Am J of Gastroentrol. Vol. 93 No. 1241-1296.