

Different Endoscopic Findings among patients Suffering Dyspepsia: Cross Sectional Study

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ABSTRACT

Background: Chronic dyspepsia is the most common disease among patients due to many contributing factors like stressful life, drugs, Helicobacter pylori infection and psychological disorders.

Aim: To determine the frequency of different endoscopic findings among patients suffering dyspepsia.

Methodology: This cross sectional (descriptive) study was carried out in the Department of Gastroenterology of Ayub Teaching Hospital Abbottabad from February to July 2019. A total of 145 patients with dyspepsia were selected and their endoscopic findings were recorded. SPSS software, v22 analyzed the data.

Results: Out 92 patients, 58(63%) were males and 34(37%) were females. In 70(76.1%) patients, pain affects/limit the daily routine. The mean calcium level was higher in patients with normal vitamin D levels as compared to vitamin D deficient groups with p-value of <0.05.

Conclusion: It was concluded that the endoscopy is a very important to investigative and identifies the specific pathology in patients of Dyspepsia.

Keywords: Gastritis, Esophagitis, Gastric ulcer, Dyspepsia and Endoscopy.

INTRODUCTION

Dyspepsia is an upper abdominal discomfort that can be long standing or recurring in nature. It involves the gastro-duodenal region presenting with symptoms like nausea, belching, vomiting, postprandial fullness and early satiety^{1,2}. It is the most common cause for patients referral to an endoscopist.

Chronic dyspepsia is the most common disease among patients due to many contributing factors like stressful life, drugs, Helicobacter pylori infection and psychological disorders³. Although upper GI endoscopy is the first line diagnostic investigation among patients having dyspepsia, but this approach is opposed due to very high prevalence of disease and its high cost burden to the health system⁴. Literature review revealed that mostly patients have functional dyspepsia who respond to the a single course of proton pump inhibitors. Hence, endoscopy in such patients is ineffective and expose subjects to its possible adverse effects⁵. Thus, the use of endoscopy in the management of uninvestigated dyspepsia remains a controversial issue worldwide.

Various previous studies revealed that the prevalence of uninvestigated dyspepsia has shown considerable variation in different countries. One study showed that frequency of gastritis was 46%, esophagitis 18% and gastric ulcer was 13% in patients with dyspepsia⁶. In another study, the most common lesion was gastritis seen in 25.1% patients, esophagitis 3.5% and gastric ulcer was 6.7% in patients with dyspepsia⁷.

This health issue remained unclear with limited data. Moreover, results in different populations showed variability therefore it's a dire need to get further evidence in this subject in our local population. Therefore we planned the

current project to determine the frequency of different endoscopic findings among patients suffering dyspepsia.

METHODOLOGY

This cross sectional study with a sample of 145 patients keeping confidence level (95%) and margin of error (10%) was carried-out in the Department of Gastroenterology of Ayub Teaching Hospital, Abbottabad from February-July 2019 after the approval from Hospital's Ethical Committee. Informed consent was taken at enrollment time. Patients aged (45-70 years) having dyspepsia for more than 3 months were included in the study whereas patients who were unfit for endoscopy with any medical disorder like Diabetes or hypertension were excluded⁸.

Data Analysis: The data were analysis by using SPSS 22. Frequencies and percentages were computed for gender, gastritis, esophagitis and gastric ulcer. Mean \pm SD was used to describe quantitative variables like age and duration of complaints. Effect modifiers like age, gender and duration of complain were controlled by stratification. Post stratification chi square test was applied at $p \leq 0.05$ was considered statistically significant.

RESULTS

In current project, mean age of all enrolled patients with SD was 55.50 ± 8.5 ranging from 45-70 years. Baseline characteristics of enrolled patients were shown in Table 1. Prevalence of gastric ulcer among patients based on gender and age distribution was given in Table 2. Prevalence of esophagitis among patients based on gender and age distribution was given in Table 3. Prevalence of gastritis among patients based on gender and age distribution was depicted in Table-4.

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Table 1: Basic Characteristics Of Enrolled Patients

Variables	Categories	Frequency	%age
Gender	Male	89	61.4
	Female	56	38.6
Age groups	45 to 60 years	106	73.1
	Above 60 years	39	26.9
Gastric ulcers	Yes	11	7.6
	No	134	92.4
Esophagitis	Yes	6	4.1
	No	139	95.9
Gastritis	Yes	40	27.6
	No	105	72.4

Table 2: Gastric Ulcer distribution among enrolled patient

Variables	Categories	Gastritis		P value
		Yes	No	
Gender	Male	08 (5.5%)	81 (59.9%)	0.421
	Female	03 (2.1%)	53 (36.6%)	
Age	45 to 60 years	09 (6.2%)	97 (66.9%)	0.498
	Above 60 years	02 (1.4%)	37 (25.5%)	

Table 3: Esophagitis distribution among enrolled patient

Variables	Categories	Gastritis		p-value
		Yes	No	
Gender	Male	03 (2.1%)	86 (59.3%)	0.559
	Female	03 (2.1%)	53 (36.6%)	
Age	45 to 60 years	05 (3.4%)	101 (69.7%)	0.564
	Above 60 years	01 (0.7%)	38 (26.2%)	

Table 4: Frequency of Gastritis distribution among enrolled patient

Variables	Categories	Gastritis		p-value
		Yes	No	
Gender	Male	24(16.6%)	65(44.8%)	0.833
	Female	16(11%)	40(27.6%)	
Age	45 to 60 years	31(21.4%)	75(51.7%)	0.461
	Above 60 years	09(6.2%)	30(20.7%)	

DISCUSSION

In this study, regarding the gender of patients, there were 89(61.4%) male and 56(38.6%) female. Thus our finding showed that more male patients complaint of dyspepsia compare to female patients. This was also reported by Khan Y et al, Olokaba et al and Aduful et al^{7,8,9}.

Age of the patients in our study ranged from 45 to 70 years with mean and SD as 55.50±8.589. There were 106(73.1%) in age group of 45 to 60 years while 39(26.9%) patients were above 60 years of age. Thus dyspepsia was more common in the sixth decade according to our study, which was in line with the findings reported by Emmanuel Jeje et al¹⁰.

We observed that gastritis was the most common endoscopic abnormality, accounting for 27.6% of cases, followed by esophagitis. This was in contrast to the Zargai RM et al who observed that esophagitis was the more common finding¹¹. Sharma P et al also reported that esophagitis was more common finding compare to gastritis while khan Y findings were similar to ours¹².

Gastritis in our study was found in 24(16.6%) male and 16(11%) female patients (p=0.88). Out of total patients with gastritis, 31(21.4%) were from 45 to 60 years of age group and 9(6.2%) were from above 60 years (p=0.461). Our observed 27.6% frequency of gastritis was lower than 46% reported by Faintuch JJ et al⁶.

As regards the frequency of esophagitis, 6(4.1%) patients had esophagitis, out of which 3(2.1%) were males and 3(2.1%) were female patients (p=0.559). Though these findings are also in accordance with Khan Y et al who also reported 3.5% results, literature has shown that there exist an enormous variation in frequency of esophagitis in different areas⁷. Faintuch JJ et al reported its prevalence to be 18% in Brazil⁶ while Oung et al observed a 0.56% frequency among the dyspeptic patients in Cambodia¹³. One reason for high esophagitis findings in Faintuch JJ may be due to the fact that their institute was a primary screening clinic.

Khan Y et al observed that 6.7% of the studied population had gastric ulcers. These results were also similar to this study which showed that frequency of gastric ulcer was found in 11(7.6%) patients on endoscopy. Gastric ulcer was found in 8(5.5%) male and 3(2.1%) female (p = 0.421). Out of these, 9(6.2%) were from 45 to 60 years of age group and 2(1.4%) were from above 60 years found with gastric ulcer while remaining 134(92.4%) found other endoscopic findings. This finding was also statistically not significant at p=0.498⁷.

CONCLUSION

It was concluded that the endoscopy is an important investigation for identifying the specific pathology in patients suffering dyspepsia. Gastritis; Esophagitis, Gastric

ulcer were the commonest endoscopic diagnostic findings in current project.

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Limitations: Our sample size was small and we recommend a similar study with much larger sample size be done. Secondly we did not perform the H. Pylori testing and no biopsies taken from the lesion to look for any malignancy.

Conflict of interest: None

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