

ENDOSCOPIC FINDINGS IN DYSPEPSIA A PROSPECTIVE STUDY OF 200 CASES

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ABSTRACT

Objective: The objectives of the study were (a) to identify the spectrum of diseases causing dyspepsia (b) to find the relative occurrence of individual diseases in different age groups.

Material and Methods: This prospective study was conducted in Medical "B" Unit of Lady Reading Hospital, Peshawar where 200 patients with dyspepsia were endoscoped. These included 123 male and 77 female patients.

Results: The mean age was 42.72 years (Standard Deviation \pm 15.71). Non-ulcer dyspepsia in 28 %, duodenal ulcer was diagnosed in 22%, gastritis in 18 %, oesophagitis in 14%, gastric ulcer in 12 %, gastric mass in 4 %, and duodenitis in 2%. Duodenal ulcer was common (72.8%) in 3rd to 4th decade, gastric ulcer in 6th to 7th decade (75.1 %), oesophagitis (64.3%) in 6th to 7th decade, gastritis (76.2 %) in 4th to 6th decade, non ulcer dyspepsia (62.5 %) in patients less than 30 years of age, while gastric mass (28.6 %) was seen in patients beyond 60 years.

Conclusion: Dyspepsia is a common problem and needs further assessment.

Key words: Dyspepsia, endoscopy, duodenal ulcer, gastric ulcer, non ulcer dyspepsia.

INTRODUCTION

Dyspepsia is upper abdominal pain or discomfort that is episodic or persistent and often associated with belching, bloating, heartburn, nausea or vomiting¹. Dyspepsia is

a highly prevalent condition and is reported to occur in 25% of population each year, but most affected persons do not seek medical advise^{2,3}. Common aetiologies include peptic ulcers and gastro oesophageal reflux. Serious causes, such as gastric and esophageal cancers are rare,^{4,5} but must also be

considered. In about 50 to 60% of patients, specific etiology is not identified (i.e. functional or non-ulcer dyspepsia)^{4,6,7}. The purpose of this study was to identify the spectrum of diseases causing dyspepsia; and the relative occurrence of individual diseases in different age groups.

MATERIAL AND METHODS

This study was conducted in Medical "B" unit, which is well-equipped with endoscopy facility. The patients included in the study were directly admitted from the out patients department (OPD) or referred directly from the private clinics.

Inclusion criteria

- 01) Patients of more than 15 years of age.
- 02) Those presenting with dyspeptic symptoms of four or more than four weeks duration.
- 03) Those having negative HbsAg and Anti-HCV status.

Exclusion criteria

- 01) Patients of age less than 15 years.
- 02) Those having chronic liver disease.

Every patient selected for endoscopy was informed about the procedure. After and overnight fast, they were given topical anesthesia with lignocaine jelly. All the endoscopies were performed safely with no complications. All the gastric masses and gastric ulcers were biopsied.

RESULTS

A total number of 200 patients were studied out of which 123 were males and 77 were females. This study included both Pakistani and Afghan nationals. Male to

female ratio was 1.6 : 1. The ages of these patients ranged from 16 – 75 years with a mean age of 42.72 years (Standard Deviation ±15.71). Table – 1 shows various age groups in years who presented with dyspepsia.

AGE GROUPS IN YEARS

Age Group	Frequency	Percentage
Below 30	64	32.0
31 – 40	36	18.0
41 – 50	28	14.0
51 – 60	36	18.0
61 – 70	28	14.0
Above 70	08	4.0
Total	200	100.0

TABLE- I

Majority (i.e. 76%) of patients with dyspepsia were in the age range between 20 – 60 years. Fig – 1 shows various age groups in the form of a bar chart.

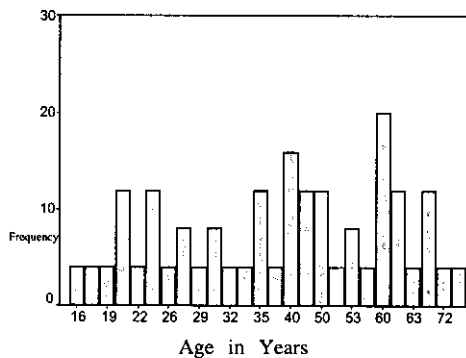


Fig. 1

The incidence of various diseases was as followed; Peptic ulcer disease accounted for 68 (34%) patients, out of whom 44 (22.0%) patients had duodenal ulcers and 24 (12.0%) patients had gastric ulcers.

Duodenal ulcer to gastric ulcer ratio was 1.8 : 1. Among 44 duodenal ulcer patients, 66 % were males and 34 % were females, male to female ration was 2 : 1. Majority

FREQUENCY OF VARIOUS DISEASES ON ENDOSCOPY

Diseases	Frequency	Percentage
Non-ulcer dyspepsia	56	28 %
Duodenal ulcer	44	22 %
Gastritis	36	18 %
Oesophagitis	28	14 %
Gastric ulcer	24	12 %
Gastric mass	08	04 %
Duodenitis	04	02 %
Total	200	100.0

TABLE - 2

(73.0 %) of patients with duodenal ulcers were in their third to fourth decade of life. Among 24 gastric ulcer patients, 62.5 % were males and 37.5 % were females, male

to female ratio was 1.6 : 1. Gastric ulcer was found common (75.1 %) in fifth to sixth decade of life. 56 (28.0 %) patients had normal endoscopic findings, of these 56 patients, 64 % were females while 36 % were males, and male to female ration was 1 : 1.7. It was common below 30 years of age. 36 (18.0 %) patients had gastritis, among these 21 (56.7 %) were males and 15 (43.2 %) were females, male to female ratio was 1.3 : 1. Oesophagitis was seen in 28 (14.0) patients, most of these patients (64.3 %) were in their sixth to seventh decade of life, with a male to female ratio 1:3. Gastric malignancy was more common beyond 60 years of age. A total of 08 (4.0 %) patients had gastric mass, it was equally common in both sexes with a male to female ratio of 1 : 1. Only 4 (2.0 %) patients were found to have duodenitis at endoscopy with equal male to female ratio.

FREQUENCY OF VARIOUS DISEASES ON ENDOSCOPY IN DIFFERENT AGE GROUPS.

Age groups In years	Duodenal ulcer	Gastritis	Oesophagitis	NUD	Gastric mass	Gastric ulcer	Duodenitis	Total
Below 30 Count	16	4	4	40				64
% within age groups	25.0	6.3	6.3	64				100.0
% within disease frequency	36.4	11.1	14.3	71.4				32.0
31 - 40 Count	16	4	8	8				36
% within age groups	44.4	11.1	22.2	22.2				100.0
% disease frequency	36.4	11.1	28.6	14.3				18.0
41- 50 Count	8	12	4	4				28
% within age groups	28.6	42.9	14.3	14.3				100.0
% disease frequency	18.2	33.3	14.3	7.1				14
51-60 Count	4	12	4	4		8	4	36
% within age groups	11.1	33.3	11.1	11.1		22.2	11.1	100.0
% disease frequency	9.1	33.3	14.3	7.1		33.3	10.0	18.0
61-70 Count		4	4		8	12		28
% within age groups		14.3	14.3		28.6	42.9		100.0
% disease frequency		11.1	14.3		100.0	50		14.0
Above 70 Count			4			4		8
% within age groups			50.0			50		100.0
% disease frequency			14.3			16.7		4.0
Total Count	44	36	28	56	8	24	4	200
% within age groups	22.0	18.0	14.0	28.0	4.0	12.0	2.0	100.0
% disease frequency	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE - 3

DISCUSSION

Dyspepsia comprises a wide spectrum of pathologies ranging from the most benign to very serious conditions. Sometimes, minor symptoms like vague abdominal pain with mild fullness, which if not taken seriously, may have catastrophic results, as in this study 4.0 % patients had gastric mass. Elderly patients may have silent peptic ulcer as found in a national study conducted at Peshawar in 1995, where 7% of the population above 70 years of age had silent duodenal ulcers⁸.

The differential diagnosis of dyspepsia is broad. Structural conditions commonly associated with dyspepsia include peptic ulcers and gastro esophageal reflux disease. (GORD)^{4,9}. Gastric or oesophageal cancers are serious causes but account for fewer than 4%^{4,5}. In this study, peptic ulcer (34 %) was found to be the major cause of dyspepsia followed by non-ulcer dyspepsia (28%). There are marked geographical variations in the incidence and prevalence of peptic ulcer¹⁰. In the United States of America (USA), peptic ulcer is seen in 25 % of the population with dyspepsia each year^{4,9}. The duodenal ulcer to gastric ulcer (DU:GU) ratio in this study was 1.8 : 1 and the male to female ratio was 2 : 1. The DU:GU ratio reported from United Kingdom¹¹ and USA is 4 : 1¹², which is more than the present study. Studies from the Western world have also shown a greater frequency of peptic ulcer especially duodenal ulcer in male population¹³.

In many patients with dyspepsia, a definite diagnosis is never established and these are labeled as non-ulcer dyspepsia (NUD). In the present study, 28% patients had non-ulcer dyspepsia. In USA, non-ulcer dyspepsia is reported to occur in 50 % of the population^{4,6,7}, thus there is a marked variation between this study and the ones conducted in the western world, this might

be because of low socioeconomic condition predisposing the patients to *H. pylori* which is a known cause for peptic ulcer disease¹⁰. Functional or non-ulcer dyspepsia is defined as a history of at least three months of dyspepsia with no definitive structural or biochemical explanation^{14,15}. Many of these patients are hypothesized to have an augmented perception of visceral pain⁹. However, there is controversy regarding the role of *H. Pylori* in non-ulcer dyspepsia^{16,17}.

Medications specially NSAID and over the counter drugs like herbal products, home remedies, vitamins and minerals are the risk factors associated with peptic ulcers¹⁸. Colonization of *H. Pylori* influences susceptibility to gastro duodenal injury and ulceration in patients taking NSAID^{19,20,21}. Dyspepsia is responsible for substantial health care costs and considerable time lost from work.

In the present study, an increase in the frequency of peptic ulcer was seen with advancing age. Majority of peptic ulcers occurred in the 3rd to 6th decade of life; most of the gastric ulcer patients were older age group than duodenal ulcer patients. Gastric carcinoma was found in patients more than 60 years of age.

The approach to previously uninvestigated dyspepsia is more difficult. It includes differentiating the cause of dyspepsia, selecting among the available options for initial management, distinguishing between patients who require endoscopy and those who can safely receive empiric drug therapy²².

CONCLUSION

It is concluded from this study that dyspepsia is a relative common problem in our Province (i.e. NWFP). Endoscopy is the gold standard test for diagnosis of various causes of dyspepsia. It provides adequate

patient reassurance and is the test of choice for targeting therapy.

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