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Original Article

Endoscopic evaluation of dyspeptic patients

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Abstract

It was observed that most of the dyspeptic patients are showing normal endoscopic findings. In this study our aims were to obtain the endoscopic findings in patient having dyspeptic symptoms and to improve the management of patient in the light of the findings that are more common. This cross sectional descriptive hospital based study was carried out in the gastroenterology department of the Shaheed Suhrawardy Medical College Hospital, Dhaka. A total 72 cases were included in this study based on the selection criteria. Among them 46 were male and 26 were female patients. Most of the dyspeptic patients had normal endoscopic findings (55.6%). Gastric erosion was found in 22.2%, reflux oesophagitis in 8.3% cases and rest were duodenal ulcer, duodenal erosions and gastric ulcer.

Key words: Dyspepsia, endoscopy, peptic ulcer disease

Introduction

Chronic and recurrent dyspeptic symptoms such as epigastric pain, postprandial fullness and early satiety are common in the general population.[1,2] Dyspeptic symptoms may be associated with endoscopically negative conditions such as functional dyspepsia, or with organic lesions such as peptic ulcer, oesophagitis and carcinoma stomach, which are easily detected by endoscopy. On the other hand, such lesions may also be asymptomatic and there is not always a clear cause and effect relationship between endoscopic findings and symptoms.[3,4]

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The association between dyspeptic symptoms and endoscopic findings is still not well characterized. For example, one outstanding dilemma is the frequent overlap between dyspeptic and reflux symptoms.[5] Dyspeptic symptoms are considered to be less likely associated with oesophagitis, unless they overlap with prominent reflux symptoms. Dyspeptic symptoms with concomitant prominent heartburn or regurgitation are thought to be associated with gastroesophageal reflux disease with or without oesophagitis and the risk of peptic ulcer is considered to be negligible in these patients.[1,6] However, robust confirmatory data are lacking.

Recently, a primary care study investigating dyspeptic patients reported a high prevalence of oesophagitis in those without prominent reflux symptoms and showed that the prevalence of peptic ulcer in patients with prominent reflux symptoms was not different than in those without such symptoms.[7] Moreover, the recent decline in the prevalence of Helicobacter pylori and peptic ulcer and the parallel increase in oesophagitis may also have an impact on the association between dyspeptic symptoms and endoscopic findings.[1,8] An improved understanding of the association between dyspeptic symptoms and endoscopic findings is essential to improve the management of patients with uninvestigated dyspepsia whose approach is initially empiric and symptom based.[1,2,6]

In this study our aim was to obtain the endoscopic findings in patient having dyspeptic symptoms and to improve the management of patient in the light of the findings those are more common.

Methods

This was a cross sectional descriptive study. This study was carried out in the Gastroenterology department of Shaheed Suhrawardy Medical College Hospital, Dhaka. This study was conducted from January 2012 to June 2012. The study population was patients attending to Gastroenterology department with the complaints of dyspepsia. According to selection criteria total 72 cases were taken. Age less than 18 years and those who unwilling to be enrolled in the study were excluded. The method consisted of meticulous history taking and clinical examination to comply with inclusion and exclusion criteria. Upper gastrointestinal endoscopy was conducted by endoscopists of the Gastroenterology unit of Shaheed Suhrawardy Medical College Hospital, Dhaka. All data were collected by preformed structured

questionnaire from the patients with fulfillment of inclusion and exclusion criteria. For statistical analysis appropriate tests were performed. P value <0.05 was considered as significant.

Results

In this study, the total number of respondents was 72 and out of them 50 (69.4%) individuals were more than 40 years of age followed by 22 (30.6%) individuals who were less than 40 years of age. Mean age was 36.06 years (Table - I).

Table-I: Age distribution of the respondents (n=72)

Age in years	Frequency	Percentage
<40	50	69.4
>40	22	30.6
Total	72	100.0

Out of 72 patients, 46 (63.9%) individuals were male and 26 (36.1%) individuals were female (Table-II). According to occupation, service holders 28 (38.9%) were most dyspeptic followed by housewives 20 (27.8%), students 6 (8.3%), farmer 4 (5.6%) and others 14 (19.4%) (Table-III).

Table-II : Sex distribution of respondents (n=72)

Sex	Frequency	Percentage
Male	46	63.9
Female	26	36.1

Table-III: Occupation of the respondent

Occupation	Frequency	Percentage
Student	6	8.3
Service holder	28	38.9
Farmer	4	5.6
House wife	20	27.8
Other	14	19.4
Total	72	100

Out of 72 patients, 28 (38.9%) individuals were smoker (Table-IV). In this study out of 72 patients, 40 (55.6 %) patients had normal upper GI endoscopic findings. Among them 36 patients had epigastric pain, 34 patients had postprandial fullness and 24 patients had nausea and early satiety. Over all findings of endoscopy of upper GIT were 55.6% normal, 8.3% reflux oesophagitis, 22.2% gastric erosions, 2.8% gastric ulcer, 5.6%, duodenal erosions and 5.7% duodenal ulcer. Smoking had significant relationship in the development of reflux oesophagitis, duodenal ulcer and gastric ulcer. (Table-V)

Table-IV: Smoking habit of the respondents

Smoking habit	Frequency	Percentage
Smoker	28	38.9
Non smoker	44	61.1
Total	72	100.0

Table-V: Endoscopic finding of the respondents

Endoscopic finding	Frequency	Percentage
Normal	40	55.6
Reflux oesophagitis	6	8.3
Gastric erosion	16	22.2
Gastric Ulcer	2	2.8
Duodenal erosion	4	5.6
Duodenal Ulcer	4	5.6
Total	72	100

Discussion

Dyspepsia is a common symptom worldwide. Dyspeptic symptoms may be associated with endoscopically negative conditions such as functional dyspepsia or with organic lesions such as peptic ulcer and oesophagitis which are easily detected by endoscopy. In this section the major findings of the current research study are discussed in the context of previous published research findings. The principal aim of this study was to obtain the endoscopic finding in the patients having dyspeptic symptoms and to improve the management of patients in light of the finding that are more common.

Most patients with dyspepsia have no detectable organic disease. Dyspepsia with no evidence of organic disease is termed non-ulcer or functional dyspepsia. For this reason, diagnosis and management of dyspepsia often go hand in hand, because an extensive diagnostic investigation to detect organic disease prior to therapy is not cost-effective and might even be harmful. Initial management strategies include a trial treatment with various medications such as prokinetics, antacids, H2-receptor antagonists and proton pump inhibitors (PPI); initial endoscopy followed by treatment according to findings; and the "test and treat" strategy of non-invasive testing for Helicobacter pylori infection to identify patients needing Helicobacter pylori eradication or endoscopy. Currently the most cost-effective strategy, in the absence of alarm symptoms, is probably to either empirically treat dyspeptic patients with medications or to "test and treat" Helicobacter pylori infection and proceed to endoscopy in a stepwise manner.[9] But in our study we could not perform biopsy for Helicobacter Pylori infection.

In this study, the total number of respondents was 72 and out of them 46 (63.9%) individuals were male and 26 (36.1%) individuals were female. Out of 72 patients, 50

(69.4%) individuals were more than 40 years of age followed by 22 (30.6%) individuals were less than 40 years of age. Mean age was 36.06 years. Overall findings of endoscopy of upper GIT were 55.6% normal, 8.3% reflux oesophagitis, 22.2% gastric erosions, 2.8% gastric ulcer, 5.6% duodenal erosions and 5.7% duodenal ulcer. It was observed that most of the dyspeptic patients were showing normal endoscopic findings. Smoking had significant relationship in the development of reflux oesophagitis, duodenal ulcer and gastric ulcer. These findings are similar to findings of Din-UI Islam study, where, among 86 dyspeptic patients, gastro-duodenal mucosa was normal in 58.14%, gastritis in 11.63%, duodenitis 2.33%, reflux oesophagitis 4.65%, peptic ulcer 17.44% and carcinoma of stomach 5.81%.[10]

These findings are also close to findings of Rocco Maurizio Zagari et al study. They found 76.8% normal endoscopic findings in dyspeptic patients.[11] In another study, Chen TS el al reported that out of 170 cases, 34 with normal endoscopic findings, 62 with gastritis and 57 were duodenal ulcers, 5 with gastric ulcers, 2 with combined ulcers and 10 with other findings.[12]

Limitations of the present study is the relatively small sample size, and hence a small number of important lesions resulting in a low power to detect significant differences in clinical and endoscopic findings between the two outcome groups.

Dyspepsia is relatively common problem in this part of the world. Most of dyspeptic patients are showing normal endoscopic findings. Careful evaluation of the patients can avoid costly investigations. However, dyspeptic patients with alarm symptoms such as weight loss, organomegaly, abdominal mass or fecal occult blood needs proper work up. Endoscopy is the gold standard for diagnosis of various causes of dyspepsia. It provides sufficient patient reassurance and is the investigation of choice for targeting therapy.

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