

## Original Research Article

# Endoscopic findings in uninvestigated dyspepsia patients

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### ABSTRACT

**Background:** Dyspepsia is a frequent syndrome in our country where there are limitations for endoscopy and there is high burden of *H. pylori* infection. It is important to establish the causes of dyspepsia hence therapeutic approach will be easier. Aim of the study was to find out the common endoscopic findings in a patient with dyspepsia symptoms large tertiary care hospital.

**Methods:** A cross-sectional study was conducted on 184 patients either admitted or seen on outpatient basis at the Basaveswara medical college and research institute, Chitradurga with the upper GI symptom dyspepsia and the data was analysed using appropriate statistical methods.

**Results:** Out of 184 patients who underwent Esophagogastroduodenoscopy (EGD scopy) 62% were male and 61% were 31-59year old. The common pathological findings in dyspeptic patients were gastritis and esophagitis.

**Conclusions:** The following insights/observations were made during the course of this study→ dyspepsia is usually caused by *H. pylori* gastritis, eradication of which relieves the symptom in this observation. Many a times dyspepsia found to have normal study. Hence wise referral for endoscopy is a key in resource limited setup.

**Keywords:** Dyspepsia, Esophagogastroduodenoscopy, Gastritis, *H. pylori*

### INTRODUCTION

Dyspepsia is a common complaint in general day today practice.<sup>1</sup> It has a prevalence of about 30% among adult in general population.<sup>2</sup> It is a complex symptom/condition which includes upper gastrointestinal(GI)tract with chronic and recurrent symptoms, including epigastric pain, discomfort, early satiety, postprandial fullness which may be overlapped with heart burn and regurgitation. The symptoms could be due to structural or functional causes. Globally the incidence of dyspepsia is in the range of 14.5-45%.<sup>3</sup> More than 80% of the population are affected with this symptom some time in their life.<sup>4</sup>

Endoscopy is the initial tool of investigation in case of dyspepsia. Among the studies conducted for common indication for endoscopy dyspepsia tops the table.<sup>5</sup> Establishment of this procedure for every patient may not

be a practical approach because it has financial burden on health system. Therefore, the use of endoscopy should be done wisely. Aims and objectives of this study was to find out the common endoscopic findings in patients with dyspepsia.

### METHODS

A prospective; cross-sectional study of 184 cases, admitted or seen on outpatient basis in Internal Medicine department in Basaveswara medical college and research institute, Chitradurga. The study was approved by ethics committee and individual participating in the study were given informed consent. Irrespective of the sex of the patient, all those aged more than 18 years with upper gastrointestinal ailment dyspepsia were considered for EGD scopy. Patients with recent myocardial infarction, severe asthma, altered sensorium, uncooperative subjects were excluded. EGD scopy was done after local

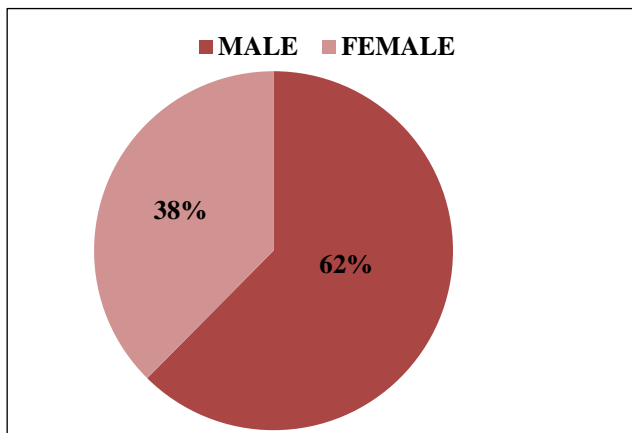
anaesthesia (10% lignocaine) sprays to the throat, using Fujinon gastroscope in the standard manner.

**Statistical analysis**

Data was analysed using simple, appropriate statistical methods and represented categorically in tables and figures.

**RESULTS**

A cross-sectional study at Basaveswara medical college and research institute.184 cases were taken into consideration. Male sex preponderance was seen (n=114) (Figure 1).



**Figure 1: Sex distribution.**

Most of them were in age group of 31-59 years (61% of the total sample, Table 1).

**Table 1: Age distribution of the cases**

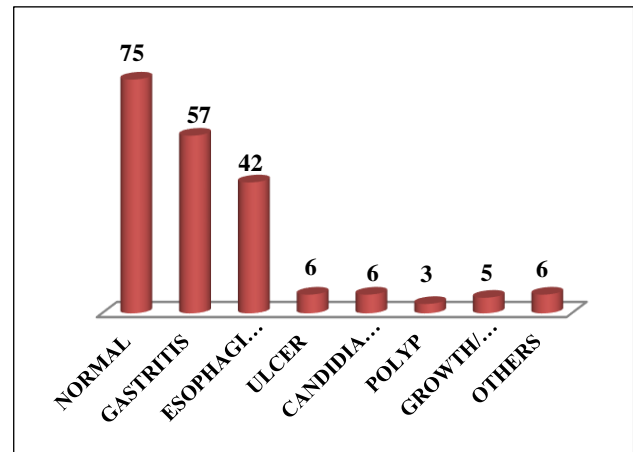
Age in years	Number of cases (184)	Percentage distribution (%)
≤30	35	19
3-44	59	32
45-59	53	29
≥60	37	20

**Table 2: Gender wise EGD scopy findings.**

Endoscopic findings	Male (n)	Female (n)	Total n and (%)
Gastritis	42	15	57 (31)
Growth	5	0	5 (2)
Esophagitis	30	12	42 (23)
Ulcer	4	2	6 (3)
Candidiasis	4	2	6 (3)
Polyp	1	2	3 (1)
Normal study	42	33	75 (41)
Others	4	2	6 (3)

Table 2 shows gender wise endoscopy findings, among 42 males and 33 females had normal upper GI endoscopy. Among the patient with gastritis, 42 patients were male as well in cases with esophagitis 30 cases were male.

Among patient with dyspepsia (n=184), normal study was seen in 75 patients, followed by gastritis (n=57) and esophagitis (n=42). To her less commonly seen findings were gastroduodenal ulcer, candidiasis, gastric growth, gastric polyp (Figure 2).



**Figure 2: Dyspepsia findings on EGD scopy.**

**DISCUSSION**

Dyspepsia was one of the most common indication for EGD scopy.<sup>5</sup> Authors usually test patients with dyspepsia for *H. pylori* infection using Rapid Urease Test (RUT) and treat with triple drug therapy if it is positive. This study results are consistent with the meta-analysis done by Ford as gastritis and esophagitis are the most common organic cause.<sup>6</sup> In recent years the prevalence of Gastroesophageal reflux disease (GERD) dramatically increased. Mostly in western countries where it affects almost 20-30% of the population, hence increasing the risk for adenocarcinoma.<sup>7</sup> Most of the patients in this study group had features suggestive of GERD and most of them are continued to follow up.

In upper GI symptoms gastric inflammation was recently found in 11% of the population.<sup>8</sup> In this study few of the patient underwent histological study moreover gastritis or esophagitis was an endoscopic diagnosis and it accounts for almost 54% which was way higher than the study conducted by Faintuch et al, where it was around 46%.<sup>9</sup> Most of the patient had different mucosal pattern. Most common being mosaic pattern. Among the patient underwent rapid urease test (RUT), 64% of cases yielded positive results and in follow up responded well to triple therapy. Hence 2/3 of the population had *H. pylori* prevalence in this study which is almost equal to study by Marques et al, in Brazil.<sup>10</sup> Chronic diarrhea may actually be manifestation of *H. pylori* gastritis with

exaggerated gastrocolic reflex which promptly gets relieved with anti-*H. pylori* treatment, this observation has been consistently made during the study period.

Listing out the other causes of dyspepsia in this study population growth/gastric outlet obstruction (GOO) accounts for 5 cases. Others like esophageal candidiasis mostly in patient with immunocompromised state like retroviral disease were seen (n=6). Gastric or duodenal ulcer was seen in 6 patients. Other incidental findings were gastroduodenal polyp seen.

Rand study on the use and misuse of EGD scopy says one of the sixth EGD scopy is inappropriate.<sup>11</sup> In this study it was around 40%. The etiology may be secondary to functional causes. But many among them underwent the procedure as they have been referred for EGD scopy. Hence wise referral and selection of patient will reduce the financial burden in resource limited country.

Usually we do EGD scopy with use of 10% lignocaine spray to anaesthetise the throat with negligible number of patients unable to co-operate for the study. Complication rate in this study was around 0.1%. Small sample size may be the lacunae of this study.

## CONCLUSION

The following insights/observations were made during the course of this study→ dyspepsia is usually caused by *H. pylori* gastritis, eradication of which relieves the symptom in this observation. Many a times dyspepsia found to have normal study.

Hence wise referral for endoscopy is a key in resource limited setup. Patients with alarm signs are the candidate for EGD scopy hence the yield will be very high.

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