

## Spectrum of Lesions on Upper GI Endoscopy at a Tertiary Care Centre of Central India

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### Abstract

**Background:** The diversity of the symptoms of upper gastro intestinal tract disorders bring a lot of patients for evaluation by upper gastrointestinal endoscopy wherever available. Upper gastrointestinal diagnostic evaluation helps to distinguish and determine the diagnosis ranging from functional disorders to carcinoma. Endoscopy has greatly facilitated in diagnosis of the ailments of the upper GI tract.

**Aims:** To study the spectrum of lesions diagnosed on upper gi endoscopy at a tertiary care centre.

**Setting & Design:** It is an observational study. Patients who reported to endoscopy unit for upper gi endoscopy from various departments were subjected to endoscopy.

**Material and Method:** 200 upper gastro-intestinal endoscopies were performed after a meticulous history and examination. The various diagnosis observed were taken into consideration with proper statistical analysis was done.

**Results and Conclusion:** In our study we observed 58(29%) patients with oesophageal varices, followed by 42 (21%) patients diagnosed as gastritis, 15(7.5%) patients with oesophagitis, 4 (2%) patients with gastric ulcer, 1(0.5%) patient with duodenal ulcer, 7 (3.5%) patients with abnormal growth and 32 (16%) patients with miscellaneous diagnosis including infective lesions, hiatal hernia and others.

**Keywords:** Upper gastrointestinal tract (Upper GI tract), Upper GI Endoscopy, Dyspepsia, Varices, Gastritis.

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### Background

Upper gastrointestinal tract diseases present with various symptoms namely dysphagia, dyspepsia, vomiting, upper gastro intestinal tract bleeding. These symptoms encompass various causes ranging from functional disorders to life-threatening cancers and

decompensated liver disease. [1] The diversity of the symptoms of upper gastrointestinal tract disorders brings lot of patients for evaluation by upper gastrointestinal endoscopy wherever available. Heartburn is the most frequent

complaint bringing the patient for upper gastrointestinal endoscopy evaluation. Dyspepsia is often broadly defined as pain or discomfort centered in the upper abdomen [2,3] but may include varying symptoms like epigastric pain, postprandial fullness, early satiation, anorexia, belching, nausea and vomiting, upper abdominal bloating, and even heartburn and regurgitation. It occurs mostly after eating/while lying recumbent. Upper endoscopy evaluates the esophagus, stomach, and duodenum, whereas colonoscopy assesses the colon and distal ileum. Upper endoscopy is advocated as the initial test for suspected ulcer disease, esophagitis, neoplasm, malabsorption, and Barrett's metaplasia because of its abilities to visualize and biopsy any abnormality. Upper gastrointestinal endoscopy facilitates direct visual examination of the oral cavity, pharynx, esophagus, stomach, pylorus and the duodenum till the 2nd part. The mucosal changes, abnormal growth, dilatation of the vessels (Varices), active bleeding is directly visualized and helps in instant diagnosis and further helps in planning the management of the case. Upper gastrointestinal endoscopy is safe and reliable for the diagnosis of the lesions of the upper GI tract along Endoscopy has greatly facilitated in diagnosis of the ailments of the upper GI tract. This study was done to look into the spectrum of lesions seen on upper GI endoscopy in patients referred for endoscopy. [4,5] Bhatia SJ et al in the year 2011 reported that GERD is the most common symptom (7.6%) of 3224 subjects had heartburn and/or regurgitation at least once a week in the Indian population. [6] considering the prevalence of symptom of heartburn upper GI endoscopy becomes a very prudent tool for early diagnosis of the cause for heartburn / GERD. [6]

## Material and Methods

This is a retrospective study done on 200 patients who had reported to the endoscopy unit for upper GI endoscopy procedure at a tertiary care centre.

The data was collected regarding the age, sex, symptoms, indication for upper gi endoscopy, and the diagnosis observed.

Appropriate statistical analysis was done using the SPSS software.

## Inclusion Criteria

Patients on whom upper GI endoscopy study was performed.

## Exclusion Criteria

None

## Observation & Results

In the present study out of the total two hundred patients subjected for endoscopy 135(67.5%) were male and 65 (32.5%) were female with a male to female ratio of 2.07:1.

In the present study we observed maximum 135(67.5%) patients with complaint of dyspepsia, followed by 46(23%) patients with complaint of upper GI Bleed while rest 45(22.5%) had complaint of of Dysphagia, Malena and others.

In the present study we observed 50 (25%) patients without any abnormality and had normal findings.

In our study we observed 58(29%) patients with oesophageal varices, followed by 42 (21%) patients diagnosed as gastritis, 15(7.5%) patients with oesophagitis, 4 (2%) patients with gastric ulcer, 1(0.5%) patient with duodenal ulcer, 7 (3.5%) patients with abnormal growth and 32 (16%) patients with miscellaneous diagnosis including infective lesions, hiatal hernia and others.

**Table 1: Sex, No. of cases and Percentage**

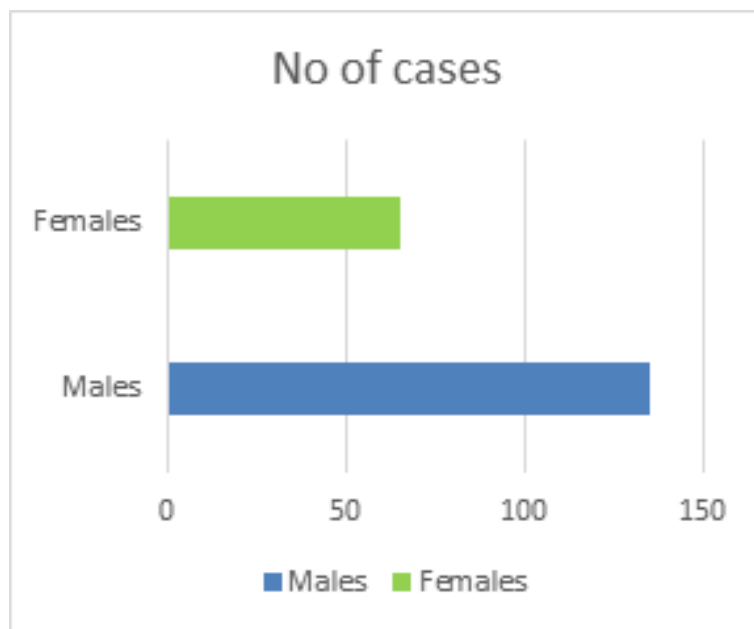
Sex	No. of Cases	Percentage (%)
Male	135	67.5%
Female	65	32.5%
	200	100

**Table 2: Complaints, No. of cases and Percentage**

Complaints	No of Cases	Percentage (%)
Dyspepsia/dysphagia	135	67.5
Upper GI Bleed	46	23%
Malena/other complaints	45	22.5%
	200	100%

**Table 3: Endoscopic Diagnosis, No. of cases and Percentage**

Endoscopic Diagnosis	No of Cases	Percentage (%)
Normal	50	25%
Varices	58	29%
Gastritis	42	29%
Gastric ulcer	4	2%
Duodenal Ulcer	1	0.5%
Esophagitis	15	7.5%
Abnormal Growth	7	3.5%
Miscellaneous	32	16%



**Figure 1: Bar Diagram Depicting the gender distribution of the cases**

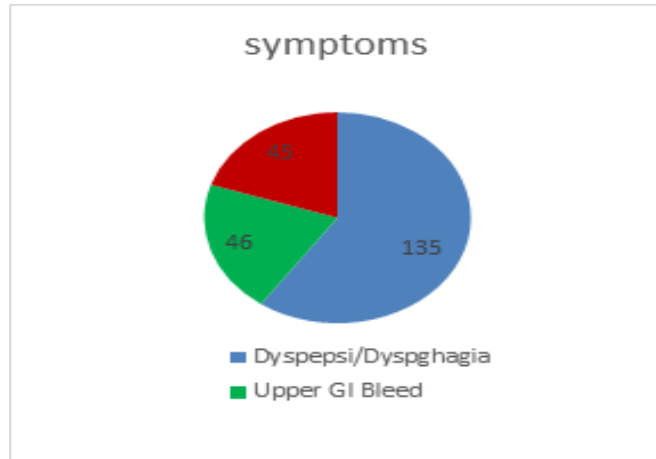


Figure 2: Bar Diagram depicting the distribution of frequency of presenting symptoms

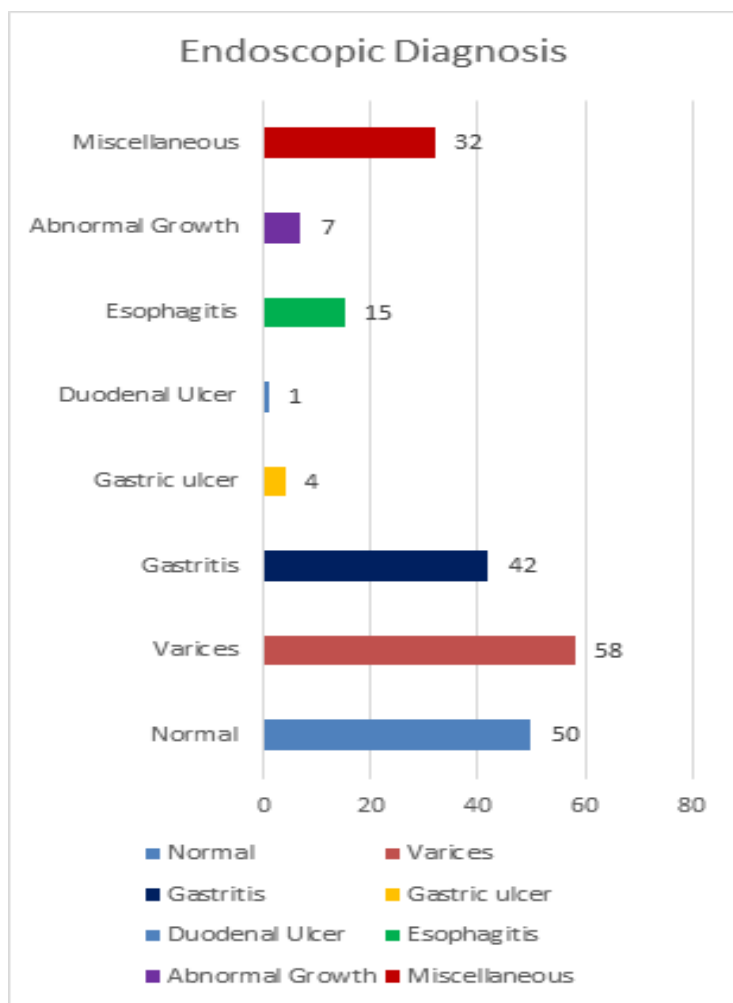


Figure 3: Bar diagram showing distribution of cases according to the endoscopic diagnosis

**Discussion**

In the present study there is male preponderance of cases subjected for endoscopy which is similar to the findings of Hassan et al, [7] Mathialagan J et al, [8]

Hussain et al [9], Rajendran et al [10], Padma et al [11] and Hadayat et al [12]. K Somani et al [13] Khandelia et al [14].

The males as compared to females give consent for the procedure easily, along

with-it males are exposed more to the risk factors than females.

In our study we observed Dyspepsia/dysphagia as the most common presenting symptom which is similar to the studies by Gado et al [15], Islam et al [16], and Khandelia et al [14] while Khurram et al.[17] in the year, noted dyspepsia in (42.6%) of cases in their study

In our study we observed highest no of cases of varices 25% which is similar to the findings by Hassan et al.[7] who also reported varices in 29% of cases; similarly, Hadayat et al [12], reported esophageal varices 234 (92.9%) as the most common endoscopic finding.

### Conclusion

We hereby conclude our study that upper GI endoscopy is a very versatile and readily available procedure which helps in instant diagnosis of many diseases and at the same time give edge for therapeutic procedures and further management of the patient.

### Conflict of Interest

None

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