



INDICATIONS AND FINDINGS OF UPPER GASTROINTESTINAL ENDOSCOPY IN A TERTIARY CARE HOSPITAL OF EASTERN INDIA

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ABSTRACT

Background: Gastrointestinal complaints are very much common in our daily practice. One of the primary investigations for diagnosis is upper gastrointestinal endoscopy (UGIE).

Aim: To determine the indications and findings of UGIE in a tertiary care hospital in West Bengal, India.

Materials and Methods: A retrospective record based study of adults who had an upper gastrointestinal endosc

Results: Out of 1443 patients who undergone UGIE, 57.1% was male and 42.9% was female. Most common indication was pain abdomen (77.2%). Normal UGIE was seen in 40.53% males and 58.48% females. Other findings were varices, ulcers erosions, mass lesions. Varices (47.93%) were the most common finding among patients presented with hematemesis and melena.

Conclusion: The commonest indication for upper gastrointestinal endoscopy in our study was pain abdomen. Common findings were ulcers, varices erosions, apart from normal findings. Varices were most common cause of hematemesis and melena.

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INTRODUCTION

Gastrointestinal (GI) complaints are very much common in patients attending OPD and admitted indoor. These complaints range from heart burn, pain abdomen, dyspepsia, dysphagia to hematemesis and melena. Upper abdominal pain and discomfort probably the most common complaints of patients but organic causes are found in very small percentages of patients¹. The prevalence of dyspepsia including both functional and organic, heart burn, and regurgitation is about 40% in some population². Another common complaint is dysphagia. It is estimated that the prevalence of dysphagia is 16-22%³. But most acute and life threatening complaint is hematemesis and melena which are important cause of significant morbidity and mortality⁴. In The United States alone every year, 350000 patients get admitted with complaint of upper gastrointestinal bleeding⁵. Upper gastrointestinal endoscopy (UGIE) is the main mode of investigation^{2,6}.

MATERIALS AND METHODS

This is a retrospective record based study, conducted at Calcutta National Medical College over a period of 1.5 years from January 2016 to June 2017. Calcutta National Medical

College is a tertiary care level hospital in Kolkata, West Bengal, India.

RESULTS

Total 1443 patients undergone UGIE during the above mentioned period. Among them 824 (57.10%) patients were male and 619 (42.90%) female. Age distribution of the patients was ranging from the first decade to seventh decade with mean age 41.23±14.69 years (Table 1) with most patients were in their fourth decade (25.91%).

Table 1 Age distribution of the population

| Age distribution(years) | Number | Percentage |
|-------------------------|--------|------------|
| 1-10 | 4 | 0.277 |
| 11-20 | 85 | 5.89 |
| 21-30 | 311 | 21.55 |
| 31-40 | 374 | 25.91 |
| 41-50 | 336 | 23.28 |
| 51-60 | 191 | 13.23 |
| ≥61 | 142 | 9.84 |
| Total | 1443 | 100 |

Most common indication was pain abdomen (77.2%), followed by chronic liver disease (CLD) without upper gastrointestinal bleeding (9.35%) and third most common indication was hematemesis and melena (8.38%) (Table 2).

Table 2 Distribution of different symptoms in the study population

| Symptom | Number | Percentage |
|----------------------|--------|------------|
| Anaemia | 7 | 0.48 |
| Pain abdomen | 1114 | 77.20 |
| Hematemesis & melena | 121 | 8.38 |
| Heartburn/reflux | 45 | 3.11 |
| Vomiting | 20 | 1.38 |
| Foreign body | 1 | 0.06 |
| CLD | 135 | 9.35 |
| Total | 1443 | 100 |

Among the pathological findings most common was erosion and ulcers, other findings were varices, portal hypertensive gastropathy (PHG), mass lesion, candidiasis (Table 3). Most common finding in patients presented with hematemesis and melena was varices (47.93%) followed by ulcer (41.33%). Among the chronic liver disease patients varices were the commonest finding (51.1%) followed by portal hypertensive gastropathy (PHG), and ulcer. Most varices were present in the patients of fourth decade (36.9%).

Table 3 Distribution of disease according to sex

| UGIE findings | Male | | Female | |
|---------------|--------|------------|--------|------------|
| | Number | Percentage | Number | Percentage |
| Normal | 334 | 40.53 | 362 | 58.48 |
| Varices | 62 | 7.52 | 33 | 5.33 |
| Ulcers | 105 | 12.74 | 57 | 9.20 |
| Scars | 53 | 6.43 | 18 | 2.90 |
| Mass lesions | 25 | 3.03 | 8 | 1.29 |
| Round worm | 1 | 0.12 | 2 | 0.32 |
| Erosions | 77 | 9.34 | 96 | 15.50 |
| Candidiasis | 4 | 0.48 | 0 | 0 |
| Lax LES | 18 | 2.18 | 12 | 1.93 |
| Foreign Body | 1 | 0.12 | 0 | 0 |
| GERD | 1 | 0.12 | 7 | 1.13 |
| Oesophagitis | 4 | 0.48 | 1 | 0.16 |
| PHG | 139 | 16.86 | 23 | 3.71 |
| Total | 824 | 100 | 619 | 100 |

Table 4 Endoscopy findings in CLD

| Large and medium varices | 30 | 22.22 % |
|--------------------------|----|---------|
| Small varices | 39 | 28.88 % |
| PHG | 42 | 31.11% |
| Ulcer | 4 | 2.96% |
| Normal | 20 | 14.81% |

Table 5 Causes of hematemesis & melena

| Varices | 58 | 47.93% |
|-------------|----|--------|
| Ulcers | 50 | 41.33% |
| Mass lesion | 3 | 2.48% |
| Normal | 10 | 8.26% |

DISCUSSION

Gastrointestinal complaints are common but a large portion of patients do not have organic findings. In our study 40.53% male, 58.48% female had normal endoscopic finding. This finding is similar to studies conducted in past where majority of patients with dyspepsia had normal finding^{7,8}. In patients presented with hematemesis and melena varices were the most common finding (47.93%) followed by ulcer (41.33%). This finding is similar to the studies conducted in past where major cause of upper gastrointestinal bleed was varices^{9,10}. In patients with chronic liver disease endoscopic finding showed varices (51.1%), portal hypertensive gastropathy (PHG) in 31.1%. Previous studies also shown prevalence of PHG in the range of 20% - 98%¹¹⁻¹⁴.

CONCLUSION

Gastrointestinal complaints are very common throughout the world and our part of the country is no exception. Many of the complaints are functional and in a resource poor set up like ours, unnecessary investigations can over burden both the hospital setup and the patients but judicious use of investigations including endoscopy is required to investigate the cause which can be benign like ulcers or malignant like masses.

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