

## Original Paper

### Diagnostic Indications for Upper GIT Endoscopy Prospective

#### Study

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#### Abstract

**Background:** Upper GIT endoscopy is considered a safe procedure performed by a doctor, a well-trained subspecialist who uses the endoscope to diagnose and, in some cases, treat problems of the upper digestive system.

**Aim:** to set a guideline for indications for upper GIT endoscopy in AKadhymiah Teaching Hospital.

**Materials And Methods:** Prospective study of 600 patients presented with upper GIT symptoms and referred for upper GIT endoscopy.

**Results & Discussion:** The results suggest the importance of symptoms indicating upper GIT endoscopy are in the following orders, dysphagia, acidity, melaena, vomiting, haematemesis, heartburn, nausea, epigastric pain and dyspepsia.

The highest age incidence with positive endoscopic findings is between 30-40years, male more than female, (male/female ratio 2/1).

**Conclusion:** The duration of symptoms over 1 month found to be significant indication.

There is no relation between smoking, alcohol or drug intake with endoscopic findings in our study

**Keyword:** GIT endoscopy, indications, pain.

#### Introduction

Endoscopical examinations of GIT has superior sensitivity and specificity over barium meal as only 5% of the patients required abarium study if endoscoical examination done first compared to 30% of the patients who required endoscopy when their radiographic study done first<sup>(1)</sup>. Diagnostic upper GIT endoscopy includes understanding indications for and contraindications to the procedure, ordering and doing the procedure recognition and managing complications and determining the appropriate treatment based on results<sup>(2, 3)</sup>.

The indications, contraindications, and recommendations for the minimal

education, training, experience, and skills necessary for competence are derived principally from, Appropriate use of gastrointestinal endoscopy, which is published by the American Society for Gastrointestinal Endoscopy (ASGE).<sup>(4)</sup>

Indications for upper GIT endoscopy

1-After unsuccessful trial of therapy for suspected functional or uncomplicated acid-peptic disorders.

2-Esophageal reflux symptoms that is persistent or progressive despite appropriate therapy.

3- As an alternative to GIT radiographic studies.

4- Upper abdominal distress associated with signs suggesting serious organic disease such as anorexia and weight loss.

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- 5- Persistent dysphagia.
  - 6- Persistent vomiting of unknown cause.
  - 7- Radiographic findings of,
    - a-neoplastic lesion, to confirm diagnosis and histopathological diagnosis.
    - b- gastric or esophageal ulcer.
    - c- evidence of upper GI stricture or obstruction.
    - d- mass.
  - 8- Upper GIT bleeding,
    - a- as the first procedure in patients with recent active bleeding of unknown origin.
    - b- when rebleeding occurs .
    - c- when surgical therapy is contemplated.
    - d- when portal hypertension or aorto-enteric fistula is suspected
    - e- for unexplained chronic blood loss and iron deficiency anaemia after negative colon evaluation.
  - 9- Upper GI symptoms in patients' undergone previous operation for peptic ulcer, endoscopy was useful for excluding or confirming stomal or recurrent ulceration.
  - 10- Removal of foreign bodies.
  - 11- Access esophageal or gastric injury.
- Contraindication, known or suspected perforated viscus.

## Patients and Methods

This is a prospective study of random sample (600) patients referred to upper G. I. endoscopic units in AlKadhymiah Teaching Hospital.

Those patients were referred from the outpatient clinic. Medical and surgical units. All patients completed a questionnaire detailing age, sex, present and past symptoms, history of peptic ulcer disease, history of cigarette smoking, alcohol consumption, N.S.A.I.D intake, previous upper G.I. endoscopy or surgery. All patients were advised to come fasting (12) hours before examination which

was carried out as an outpatient except those already admitted patients ,the incidence of outpatient examined patients was 61% and inpatients examined was 39%.

The endoscope used is Pentax Olympus under xylocain jelly 2% or spray. We place the patient in supine position with the head flexed forward then introduce the endoscope and turn the patient to the left lateral position. The instrument has the ability to view all areas of the esophageal, gastric mucosae, esophageo-gastric sphincter.

In patients with an intact stomach and duodenum, the duodenum was intubated by keeping the pylorus in view while advancing the instrument toward it. In patients with gastroentrostomy, the stoma was viewed and an attempt was made to enter both afferent and efferent loops and duodenal intubation was also attempted.

## Results

Endoscopic examinations of the 600 symptomatic patients revealed that 150 patients 25%, found to have normal esophageo-gastro-duodenal mucosa (negative finding), the remaining 445 patients, 74.2%, shows various endoscopic abnormalities (positive finding), while 5 patients, 0.8%, were uncooperative and endoscopy was abandoned.

All patients presented with dysphagia, 5 patients, had positive findings.

The patients presented with acidity, 110 patients (92.4%) had positive findings, malaena in 178 patients (89.8%) vomiting in 196 patients (88.2%), haematemesis in 115(87.7%) heartburn in 104 patients (78.4%), dyspepsia in 151 patients (77.2%).

(6.9%), patients using N.S.A.I.D.39 patients (8.7%).

The duration of symptoms, patients with history less than 1 month had positive findings in 56 patients (12.5%) and those patients with more than 1 month had positive findings in 389 patients (87.5%). The highest incidence among 30-40 years with arrange of age between (11-80) years. Male 66.9%, Female 33.1%. table 1

## Discussion

The results of this study showed that one quarter 1/4 of the referred patients had no abnormality.

Looking at the symptoms of those patients, most of them were male between age of (21-30) years and most of the symptoms were epigastric pain and/or dyspepsia in which their symptoms may be attributed to essential dyspepsia.

Among those patients, 20 patients have no upper GI symptoms and underwent endoscopy for other reasons: -unexplained anaemia, checking upper abdominal symptoms in patients with chronic renal failure, patients with other medical or surgical problems.

**Table 1.** Frequency of positive endoscopic findings in both sexes (445 patients):

Endoscopic diagnosis			No. of patients	Male	Female
1-Peptic ulcer	A-Duodenal ulcer	-Chronic active DU	162	10	52
		-Acute bleeding DU	41	26	15
		-Chronic active DU with deformed duodenal bulb	62	42	20
		-Healed DU	48	29	19
		-Pyloric stenosis secondary to DU	13	11	2
		-Secondary to others	2	0	2
	B-Gastric ulcer	-Benign	3	1	2
		-Malignant	6	4	2
2-Inflam-matory	A-Duodenitis		42	24	18
	B-Gastritis		18	11	7
	C-Reflux esophagitis		17	11	6
	D-Hiatus hernia		6	3	3
3-Esophageal varices			9	9	0
4-Postoper-active ulcer	A-Stomal ulcer		8	8	0
	B-Silk ulcer		2	2	0
5-Others	A-CA esophagus		2	2	0
	B-CA duodenum		2	2	0
	C-Gastric polyp		2	1	1
TOTAL			445	298	147

The highest incidence of positive endoscopic findings among symptoms was dysphagia, the other symptoms are in the following order:- Acidity, melaena, vomiting, haematemesis, heartburn, nausea, epigastric pain and dyspepsia.

A combination of more than one symptom is more likely to give more positive results as dysphagia with heartburn or epigastric pain with vomiting or haematemesis. There is high incidence of positive findings among patients with long history of symptoms as more than one month (87.5%). There is high incidence (78%) of positive findings among nonsmokers and high among nonalcoholic (93.1%) while patients with history of smoking, alcohol intake, and had positive findings in only 22% and 6.9% respectively.

A multicenter study performed in Italy <sup>(5)</sup> for 6270 patients in 44 hospitals over 1 month revealed 22.9% negative findings which almost match our result of 25% negative findings. The rate of positive findings was comparable to our results.

The difference between this study and our study probably because they did the procedure as an emergency situation for cases with upper GI bleeding.

There is high incidence (78%) of positive findings among non-smokers and high among non-alcoholic (93.1%) and this cannot be explained.

## Conclusion

The importance of symptoms indicating upper GI endoscopy should be one or more of the following symptoms Dysphagia, acidity, melaena, vomiting, haematemesis, heartburn, nausea, epigastric pain and dyspepsia.

The symptoms should be persistent at least for one month. The age, sex of the patients should be considered.

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