Original Research Article

Analysis of upper gastro intestinal scopy finding in public hospital associated with medical college

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ABSTRACT

Background: Upper gastro intestinal scopy is common indication in patients of upper gastrointestinal complaints with normal ultra sonography /CT abdomen. Upper gastrointestinal pathology up to second part of duodenum is easily diagnosed by upper gastro intestinal scopy. An objective of the study was to find out cause of upper gastrointestinal discomfort in study group with diagnostic yield and correlation with clinical profile.

Methods: Prospective observational cross sectional study was done of all the age group patients and either gender, presented with upper gastrointestinal discomfort in the surgical OPD and undergone upper gastrointestinal scopy at our institute.

Results: Commonest finding in upper gastrointestinal scopy was chronic gastritis, duodenitis, gastritis with lax oesophageal sphincter, duodenal ulcer. Patients with dyspepsia undergone upper gastrointestinal scopy have 90% positive finding. Total patient 154 have undergone upper gastrointestinal scopy with 81% positive finding.

Conclusions: In our study, dyspepsia was most common indication for upper gastrointestinal scopy. In our study, a highest finding was chronic gastritis in 46 patients and duodenitis in 34 patients. This finding was similar to other study. In our study, most common appropriate indication with highest positive finding is acid peptic disease and least positive finding is vague upper abdominal discomfort.

Keywords: Day care procedure, Diagnostic yield, Upper gastro intestinal scopy

INTRODUCTION

Upper gastro intestinal scopy is common indication in patients of upper gastrointestinal complaints with normal ultra sonography/CT abdomen. It is out door patient procedure. It is mainly done with local lignocaine spray. Upper gastrointestinal scope is flexible fiber optic cable with camera attached at tip. This scope is inserted through mouth and it passed up to duodenum.

Upper gastrointestinal pathology up to second part of duodenum is easily diagnosed by upper gastro intestinal scopy. If biopsy required than it can be taken and tissue diagnosis can be done. The commonest endoscopic diagnosis is chronic gastritis, duodenal ulcer, chronic

oesophagitis, gastroesophageal reflux disease, duodenal ulcers, oesophageal varices.¹⁻³

Upper gastro intestinal scopy provides baseline data on the age distribution of major upper gastrointestinal diseases among the population. The peculiarities of upper gastrointestinal endoscopic findings in advanced age will clarify. The influence of demographic changes on the pattern of these diseases can be evaluated against our findings in the future.^{4,5}

Objectives of this study were to find out cause of upper gastrointestinal discomfort in study group, to find out diagnostic yield of upper gastrointestinal endoscopy with regard to total study group. And to correlation of finding

of upper gastrointestinal endoscopy with patients' demographic and clinical profile

METHODS

This is prospective observational cross sectional study of patients of all the age group and either gender, presented with upper gastrointestinal discomfort in the surgical OPD and undergone upper gastrointestinal scopy from December 2015 to June 2016 at surgery department, GMERS medical college, Gandhinagar, Gujarat, India.

Inclusion criteria

- Patients of all the age group and either gender, presented with upper gastrointestinal discomfort in the surgical OPD and undergone upper gastrointestinal scopy
- Patients with normal ultrasonography/CT abdomen finding.

Exclusion criteria

- Already diagnosed patients.

RESULTS

Prospective study was done of patients undergone upper gastrointestinal scopy from December 2015 to June 2016 at surgery department, GMERS medical college, Gandhinagar, Gujarat, India (Table 1).

Table 1: Sex distribution.

Sex	No (n = 154)
Male	89 (58%)
Female	65 (42%)
Total	154

Total 154 patients were undergone upper gastrointestinal scopy with 58% male and 42% female (Table 2). 42% patients were from 31 to 50 years of age and 32% patients were from 11 to 30 years of age (Table 3).

65% patients have acid peptic symptoms and 19% have reflux. Total 100 patient of dyspepsia, patients undergone upper gastrointestinal scopy have 90% positive finding with correlation with symptoms chronic (gastritis 46, duodenitis 34, duodenal ulcer 10), 10 patients with acid peptic disease have relatively normal upper gastrointestinal scopy. Out of total 30 patients of reflux symptoms, Gastritis with lax oesophageal sphincter found in 20 patient and 10 have normal finding. Out of total 12 patients of vague abdominal discomfort, chronic gastritis found in 6 and 6 have normal finding. Out of total 2 patients of dysphasia, oesophageal malignancy found in 1 and normal in 1. Out of 8 patients of hematemesis, varices found in 2, chronic gastritis in 4 and normal

finding in 2. Out of 2 patient of gastric outlet obstruction, pyloric stricture found in 1, normal finding in 1 (Table 4).

Table 2: Age distribution.

Age distribution (Years)	Total no (n = 154)
< 11	0
11 to 30	49 (32%)
31 to 50	65 (42%)
51 to 70	35 (23%)
> 71	5 (3%)

Table 3: Symptoms of patients undergone upper gastrointestinal scopy.

Symptoms	No (n = 154)
Dyspepsia	100 (65%)
Reflux	30 (19%)
Vague upper abdominal discomfort	12 (8%)
Dysphagia	2 (1.5%)
Hemetemesis	8 (5%)
Gastric outlet obstruction	2 (1.5%)

Table 4: Diagnosis yield of upper gastrointestinal scopy.

Symptoms	Diagnosis	No (n = 154)	Positive finding % in relation to symptoms
Acid peptic disease (n = 100)	Chronic gastritis	46	90 (90%)
	Duodenitis	34	
	Duodenal ulcer	10	
	Nil	10	
Reflux (n = 30)	Gastritis with lax oesophageal sphincter	20	20 (67%)
	Nil	10	
Vague upper abdominal discomfort (n = 12)	Chronic gastritis	6	6 (50%)
	Nil	6	
Dysphagia (n = 2)	oesophageal malignancy	1	2 (100%)
	oesophagitis	1	
Hemetemesis (n = 8)	varices	2	6 (75%)
	Chronic gastritis	4	
	Nil	2	
Gastric outlet obstruction (n = 2)	Pyloric stricture	1	1 (50%)
	Nil	1	

Total patient 154 have undergone upper gastrointestinal scopy with positive finding in upper gastrointestinal scopy 125 (81%) and normal finding 29 (19%). There was no complication in our study (Table 5).

Table 5 positive finding in upper gastrointestinal scopy.

Findings	n (%), n = 154
Positive finding in upper gastrointestinal scopy	125 (81%)
Nil finding	29 (19%)

DISCUSSION

There were more males (58%) than female (42%), similar to study done by Jeje E, Olajide T, Akande B, this may be because of more upper gastrointestinal disease prevalent in male.⁶ No patients were less than 11 years and more patients were in 31 to 50 years (42%) of age. This is similar to study done by Jeje E, Olajide T, Akande B.⁶ In our study, dyspepsia was most common indication for upper gastrointestinal scopy. Similar finding was found in study done by Jeje E, Olajide T, Akande B.⁶ In our study, highest findings is Chronic gastritis in 46 patients and Duodenitis in 34 patients. Study done by Jeje E, Olajide T, Akande B shows highest finding of duodenal ulcer, gastritis and duadenitis.⁶ Study done by Al-Quorain A, Satti MB, Al-Hamdan A, al-Ghassab G, al-Freihi H, al-Gindan Y shows highest finding of gastritis and duodenitis which is similar to our study.⁷

Our study shown 81% positive finding in total 154 patients. study done by Gonvers JJ, Burnand B shows 57% positive finding.⁵ Study done by Emmanuel Jeje, Thomas Olajide, Bashir Akande shows 66% positive finding.⁶ Study done by Mangualde J, Cremers MI et al shows 82% positive finding.⁸

In our study, most common appropriate indication with highest positive finding is acid peptic disease and least positive finding is vague upper abdominal discomfort. Study done by Chan YM, Goh KL find most common appropriate indication was "upper abdominal distress that persists despite an appropriate trial of therapy" and most common inappropriate indication was "dyspepsia in patients aged 45 years or below without adequate empirical medical treatment".⁹ This finding is differ with our study may be because of all our patients already treated empirical medical treatment before upper gastrointestinal scopy.

CONCLUSION

It is safe day care procedure with higher rate of diagnosis of upper gastrointestinal disease and ruling out serious conditions like malignancy.

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Conflict of interest: None declared

Ethical approval: The study was approved by the institutional ethics committee

REFERENCES

1. Al-Quorain A, Satti MB, Al-Hamdan A, Al-Gassab G, Al-Freihi H, Al-Gindan Y. Pattern of upper gastrointestinal disease in the eastern province of Saudi Arabia: Endoscopic evaluation of 2982 patients. *Trop Geogr Med.* 1991;43:203-8.
2. Hamo IM. Esophageal disease in Sudan diagnosed by fiberoptic endoscopy. *Trop Geogr Med.* 1993;45:22-4.
3. Johnsson F, Joelsson B, Gudmundsson K, Greiff L. Symptoms and endoscopic findings in the diagnosis of gastroesophageal reflux disease. *Scand J Gastroenterol.* 1987;22(6):714-8.
4. Ayoola EA, Al-Rashed RS, Al-Mofleh IA, Al-Faleh FZ, Laajam M. Diagnostic yield of upper gastrointestinal endoscopy in relation to age and gender: a study of 10112 Saudi patients : Hepatogastroenterology. 1996;43(8):409-15.
5. Gonvers JJ, Burnand B, Froehlich F, Pache I, Thorens J, Fried M, et al. Appropriateness and diagnostic yield of upper gastrointestinal endoscopy in an open-access endoscopy unit. *Endoscopy.* 1996;28(8):661-6.
6. Emmanuel Jeje, Thomas Olajide, Bashir Akande. Upper gastrointestinal endoscopy - our findings, our experience in Lagoon Hospital, Lagos, Nigeria. *Macedonian J Med Sci.* 2013;6(2):168-73.
7. Al-Quorain A, Satti MB, Al-Hamdan A, Al-Ghassab G, Al-Freihi H, Al-Gindan Y. Pattern of upper gastrointestinal disease in the eastern province of Saudi Arabia. *Trop Geogr Med.* 1991;43(1-2):203-8.
8. Mangualde J, Cremers MI, Vieira AM, Freire R, Gamito E, Lobato C, et al. Appropriateness of outpatient gastrointestinal endoscopy in a non-academic hospital. *World J Gastrointest Endosc.* 2011;3(10):195-200.
9. Chan YM, Goh KL. Appropriateness and diagnostic yield of EGD: a prospective study in a large Asian hospital. *Gastrointest Endosc.* 2004;59(4):517-24.

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