ORIGINAL RESEARCH PAPER

General Surgery

A PROSPECTIVE STUDY OF DISEASE PATTERN AND PREVALENCE IN PATIENTS UNDERGOING UPPER GI ENDOSCOPY

KEY WORDS: UGI, Endoscopy, Gastritis, GERD

Dr. Ashutosh Abhishek Junior Resident, Department of General Surgery, TATA Main Hospital, Jamshedpur- 831005

Dr. Abhijeet Kumar* Junior Resident., Department of General Medicine, Patna Medical College & Hospital, Patna- 800004 *Corresponding Author

ABSTRACT

INTRODUCTION: Upper GI endoscopy is the visual examination of the lining of oesophagus, stomach, first and second part of duodenum. This is performed by passing a long flexible endoscope through mouth under local anaesthesia. The UGI tract is examined through the camera situated at the tip of the endoscope and detects any abnormalities. If necessary, biopsies can be taken during examination. And hence we can find the prevalence of various diseases which lead to UGI examination.

AIM: To find out prevalence of Different disease patterns in patients undergoing UGI endoscopy and to study patterns of indications and endoscopic findings.

METHODS: In this cross-sectional study, 300 patients presented with upper GI symptoms were examined and followed by UGI endoscopy.

RESULT: It was found that most common upper GI symptom needing endoscopy was Epigastric pain(36.7%, p=0048) and most common endoscopic finding finding was Gastritis(53.3%, p=0.00001).

CONCLUSION: So we conclude that Epigastric pain is the most common indication and Gastritis is the most common finding of UGI endoscopy.

INTRODUCTION:

Gastrointestinal symptoms such as chronic abdominal pain, vomiting & diarrhoea are common all over the world. Establishing cause of these diseases leads to more efficient treatment & consequently decreases morbidity & mortality rates.

Chronic gastritis has high prevalence all over the world.[1] Helicobacter pylori gastritis is the principal cause of chronic active gastritis and has major complications like gastric adenocarcinoma and mucosa associated lymphoid tissue lymphoma.[2] There are many other etiological factors such as smoking, non-steroidal anti-inflammatory drugs (NSAIDS), and reflux of gastric juice (chemical gastritis) that are also implicated to cause chronic gastritis. H. pylori, though is regarded as the primary cause of gastritis, it can act as a synergist in addition with other etiological factors.[3]

UGI endoscopy is the visual examination of the lining of oesophagus, stomach, first and second part of duodenum. This is performed by passing a long flexible endoscope through mouth under local anaesthesia. The UGI tract is examined through the camera situated at the tip of the endoscope and detects any abnormalities. If necessary, biopsies can be taken during examination.

Interventional UGI endoscopy implies use of endoscopy for some therapeutic purposes & can be done for

1. Dilatation of oesophagus , stomach & duodenum
2. Removing polyp
3. Removal of swallowed foreign body
4. Treatment of bleeding vessels and ulcer by internal injection of sclerosant or application of electrical diathermy, laser or heat probes , band ligation.

AIM

1. To document the prevalence of demographic characte ristics & disease pattern in patient undergoing upper GI endoscopy.
2. To study the pattern of indications and endoscopic findings in patients undergoing upper GI endoscopy.

METHODS

Study Population:

This study is conducted in Tata Main Hospital. Patient presenting with upper GI symptom suggestive of GERD , dyspepsia, dysphagia , GI bleed , post cholecystectomy persistent pain, unexplained wt. loss/anaemia with upper GI symptom and willing for upper GI endoscopy are included in study after proper written and informed consent.

Study Period: Total study duration was 21 months from August 2017 to April2019.

Sample Size: Total number of patients taken in study was 300, Required sample size was calculated by formula $n = 4pq / (L^2)$.

Study technique: Prospective observational study

Study design: Prevalence study

Statistical Analysis: For statistical analysis data were entered into a Microsoft excel spreadsheet and then analyzed by SPSS (version 24.0; SPSS Inc., Chicago, IL, USA) and Graph Pad Prism version 5. Data had been summarized as mean and standard deviation for numerical variables and count and percentages for categorical variables.

Z-test (Standard Normal Deviate) was used to test the significant difference of proportions.

P-value ≤ 0.05 was considered for statistically significant.

Sample Design:

Case Selection:

A. Inclusion Criteria:-

1. All patient with symptom suggestive of GERD
2. All patient with recent dyspepsia ,dysphagia and GI bleed
3. Post cholecystectomy upper abdominal pain
4. All patient with abdominal symptoms not responsive to appropriate medical treatment.
5. Patient presenting with abdominal symptoms with unexplained anaemia/wt. Loss

B. Exclusion Criteria:-

1. All patient with age less than 12 years
2. All patients uncooperative for upper GI endoscopy

Study protocol:

History & Clinical examination followed by Upper

GastroIntestinal endoscopy (UGI).

RESULTS

Among the patients undergoing UGI endoscopy 110(36.7%) participants were having epigastric pain, Post cholecyst ectomy pain was present in 30(10.0%) participants, in 57(19.0%) participants dyspepsia was present,6(2.0%) participants were having dysphagia, 78(26.1%) participants were suffering from persistent GERD,9(3.0%) patients were suffering from malena,3(1.0%) patients were suffering from hematemesis,22(7.3%) participants were suffering from unexplained anaemia,9(3.0%) patients were being evaluated for unexplained weight loss.

The value of *z* is 2.8164. The value of *p* is .0048. The result is significant at *p* < .05.

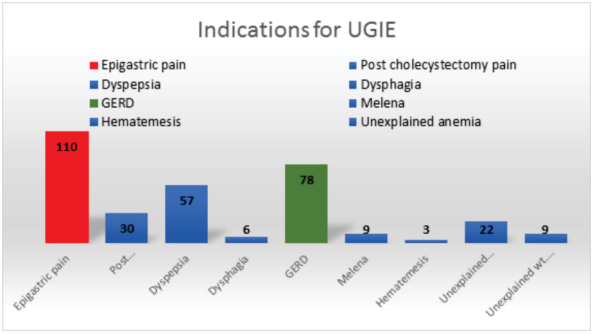

Figure 1

21(7.0%) participants were found to be suffering from esophagitis, Hiatal hernia was present in 9(3.0%) participants,5(1.7%) participants were having oesophageal varices,3(1.0%) participants were found to be suffering from oesophageal growth, Gastritis was present in 160(53.3%) participants, Gastric erosion were found in 26(8.6%) participants,34(11.3%) patients had gastric ulcer,6(2.0%) patients had gastric growth,108(36%) patients had duodenitis,20(6.6%) patients had duodenal erosion, 46(15.3%) patients had duodenal ulcer,36(12%) patients were having normal study.

The value of *z* is 4.2701. The value of *p* is < .00001. The result is significant at *p* < .05.

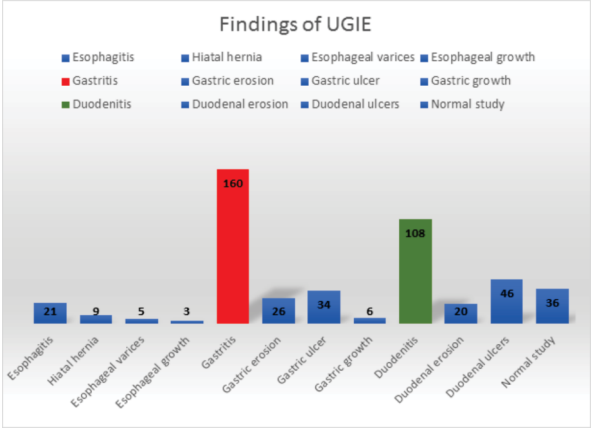

Figure 2

CONCLUSION

1. We found that most common age group who had undergone endoscopy were from the age group of 31 to 40 years belonging to 4th decade of life in our study
2. Most common indication to perform UGI endoscopy was epigastric pain followed by persistent GERD and dyspepsia. In the study we conducted, low proportion of symptoms related to dysphagia and malena was found.
3. After performing UGIE the most common finding was gastritis followed by duodenitis. Other significant finding to some extent were duodenal ulcer and gastric ulcer.
4. While performing the UGIE most common site of lesion was found to be stomach and duodenum followed by oesophagus and stomach. But it is an important and needed to be duly noted that in many cases there were overlapping of sites of lesions.
5. Normal study was present in 12%(36 out of 300 participants),which emphasizes in need to take considerable step in recognising the need of when to or when not to perform the endoscopic procedures

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