ORIGINAL ARTICLE

Endoscopic Findings of Upper Gastrointestinal Diseases at a Tertiary Care Hospital in Dhaka

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Abstract :

Endoscopic findings help the clinical to give the treatment properly. The purpose of the present study was to find out common findings of UGI endoscopy at a tertiary care hospital in Dhaka. This retrospective study was conducted in the Department of Gastroenterology at Holy Family Red Crescent Hospital, Dhaka from 14th October 2009 to 25th june 2013 among all the patients presented with GI symptoms. Endoscopies were documented on a computer-based datasheet. Under topical lidocaine, a Fujinon EG fiber optic Upper GI scope was passed through the mouth of a patient in left lateral position through the upper esophageal sphincter into the esophagus stomach and duodenum. Biopsies were collected and histopathology reports were recorded. A total number of 2632 patients were recruited for this study and endoscopy was done of which 1406(53.4%) cases were reported as abnormal findings. Male (52.1%) was predominant than female (47.9%). Maximum patients were diagnosed as peptic ulcer disease (54.2%) followed by varices with or without gastropathy (20.0%), gastric cancer (11.5%), esophageal cancer (9.6%) and gastritis with or without duodenitis which were 267cases, 154cases, 128cases and 63(4.7%) cases respectively. The most common cause of UGI bleeding was due to PUD (43.1%) followed by varices (34.7%), Gastric cancer (12.5%). The most common endoscopic findings are the PUD, varices with or without gastropathy, gastric cancer, esophageal cancer and gastritis with or without duodenitis.

Introduction:

Upper Gastrointestinal (UGI) complaints are commonly seen in patients in both in indoor and outdoor clinical practice[1]. However, symptoms may arise from a variety of disorders, including functional dyspepsia and irritable bowel syndrome, and the potential risk of invasive procedures must be balanced against the benefit of detecting a significant organic disease. Sometimes, they create great diagnostic difficulty[2-3]. In many centers, UGI endoscopy has become the initial and usually sole diagnostic approach to unexplained UGI symptoms[4]. UGI symptoms are common but most patients do not have major upper gastrointestinal pathology[5]. Symptoms of recurrent upper abdominal pain or dyspepsia are experienced by 25-40% of the general population[6]. These symptoms accounted for more than 11 million office visits annually to physicians[7]. Multiple diagnostic tests are available for evaluating dyspepsia, including therapeutic trials, testing for Helicobacter pylori, upper gastrointestinal radiography, and endoscopy. A randomized controlled trial found that initial endoscopy followed by directed therapy is associated with lower costs and fewer

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days out of work than empiric therapy with histamine H2 receptor antagonists[3]. Endoscopy is the most accurate method of diagnosis of most conditions method of diagnosis of most conditions associated with dyspepsia, including gastric cancer, peptic ulcer disease, oesophagitis and gastro-duodenitis[8]. However, endoscopy involves some discomfort, significant social inconvenience, and cost. Attempts to identify those patients most likely to benefit from endoscopy have met with variable success[9].

UGI endoscopy is the diagnostic modality of choice for UGI bleeding as well and it also has therapeutic potential[4]. In addition to bleeding, obstructive lesions like carcinoma esophagus and stomach, strictures of esophagus, hiatal hernias and gastropathies are also common endoscopic findings[10]. The purpose of the present study was to find out common findings of UGI endoscopy at a tertiary care hospital in Dhaka.

Materials and method:

This retrospective study was conducted in the Department of Gastroenterology at Holy Family Red Crescent Hospital, Dhaka from 14th October 2009 to 25th june 2013 for a period of about 3 years 8 months. All the patients presented with GI symptoms attended at the OPD and IPD of the hospital were included as study population. Endoscopies were documented on a computer-based datasheet (ViewPoint, GE Healthcare, Chalfont St. Giles, U.K.) that included a detailed description of the findings by choosing from a predefined list and electronic storage of all images taken during the investigation. Diagnosis is based on accepted criteria8. Under topical lidocaine, a Fujinon EG-201 FP fiber optic Upper GI scope was passed through the mouth of a patient in left lateral position through the upper esophageal sphincter into the esophagus stomach and duodenum. Biopsies were collected and histopathology reports were recorded.

Results:

A total number of 2632 patients were recruited for this study and endoscopy was done of which 1406(53.4%) cases were reported as abnormal findings (Table I). Male was predominant than female which was 1372 (52.1%) cases and 1260 (47.9) cases respectively. The ratio was 1:1.1 (Table II). Maximum patients were diagnosed as peptic ulcer disease which was 725 (54.2%) cases followed by varices with or without gastropathy, gastric cancer, esophageal cancer and gastritis with or without duodenitis which were 267 (20.0%) cases, 154 (11.5%) cases, 128 (9.6%) cases and 63 (4.7%) cases respectively (Table III). Male was predominant in all abnormal endoscopic findings of upper GIT (Table IV). The most common cause of UGI bleeding was due to PUD which was 31 (43.1%) cases followed by varices, Gastric cancer, Gastro- duodenitis which were 25 (34.7%) cases, 9 (12.5%) cases and 6 (8.3%) respectively (Table V).

Table-I: Showing the Findings of Endoscopy (n=2632)

Endoscopic Findings	Frequency	Percentage
Normal findings	1226	46.6
Abnormal findings	1406	53.4
Total	2632	100.0

Table-II: Gender Distribution of Study Population (n=2632)

Gender Distribution	Frequency	Percentage
Male	1372	52.1
Female	1260	47.9
Total	2632	100.0

Table-III: Distribution of Abnormal Endoscopic Findings (n=1337)

Endoscopic Findings	Frequency	Percentage
PUD	725	54.2
Varices &/gastropathy	267	20.0
Gastric cancer	154	11.5
Gastritis &/duodenitis	128	9.6
Esophageal cancer	63	4.7
Total	1337	100.0

Table-IV: Gender Distribution among the Different Pathology of Upper GIT

Disease	Male	Female	Total	Ratio
PUD	577	148	725	3.9:1
Gastric Cancer	92	62	154	1.5:1
Esophageal Cancer	50	13	63	3.8:1
UGI Bleeding	54	18	72	3:1

*Antral carcinoma= 52

Table-V: Distribution of Diseases causing Upper Gastrointestinal Bleeding

UGI Bleeding	Frequency	Percentage
PUD	31	43.1
Varices	25	34.7
Gastric cancer	9	12.5
Gastro- duodenitis	6	8.3
Unknown	1	1.4
Total	72	100.0

Discussion:

Upper gastrointestinal endoscopy is a standard technique that provides direct visualization of the gastrointestinal tract from the esophagus through the stomach, duodenal bulb, and descending duodenum[11]. Upper GI endoscopy is an important tool in the initial investigation of any upper abdominal complaints and other chronic upper GIT disorders as well3. This study is an effort to find out different conditions that can present as upper GIT disorder in a random population of patients attended at a tertiary care hospital in Dhaka city.

In this study a total number of 2632 patients were recruited for this study and endoscopy was abnormal in 53.4% cases. It is interesting that patients presented with any upper GIT complaints have different abnormalities in the endoscopy result. Similar to his present study Gulia et al[5] have reported that upper GIT symptoms are related with abnormal pathology to the gastrointestinal tract. Therefore, it is ideal to do endoscopy of Upper GIT among these patients. Heartburns and the presence of other alarm symptoms like nausea, vomiting, anorexia, dysphagia, marked loss of weight & upper GIT bleeding are good predictors of the presence of major endoscopic findings in the upper gastrointestinal tract. Although previous studies show a majority of the patients with dysphagia and related symptoms are more likely to suffer from benign conditions like superficial oesophagitis, chances of having Barrett's oesophagus or even cancer as underlying pathology are not uncommon[12]. On the other hand, Sharma et al[13] reported that <40% of patients with symptoms typical of GORD have endoscopically apparent esophagitis; therefore, the majority of patients with such symptoms have non-erosive reflux disease (NERD).

In this study male (52.1%) was predominant than female (47.9%). The ratio was 1:1.1. The reason may be due to habit of smoking. The women are more habituated to tobacco intake which may cause the large number of cases in this study. Similar to this present study Ahmed et al[14] have found that male are predominant which is consistent with the present study. Galbin et al[10] have reported that male is more commonly affected in upper GIT pathology than female and the present study has similar result.

Maximum patients were diagnosed as peptic ulcer disease (54.2%) followed by varices with or without gastropathy (20.0%), gastric cancer (11.5%), esophageal cancer (9.6%) and gastritis with or without duodenitis (4.7%). PUD is the most common disease found by endoscopy. This is very common in this country. Ahmed et al1 have reported that PUD is the most common upper GIT disease which is similar to the present study. Gastritis was also found on endoscopy. In another study Khan et al[11] have reported that among the positive endoscopic findings, inflammatory lesions were the most common and half of these were gastritis which is consistent with the present study result. This is comparable with other studies[12]. Data regarding H. pylori and NSAIDs intake in patients was incomplete. Peptic ulcer disease and upper GI malignancies were almost comparable with other study Kadakia et al[13]. Among peptic ulcer disease, duodenal ulcer was 4 times more common than gastric ulcer; finding comparable to other studies. Carcinoma stomach was more common in males[1].

Male was predominant in all abnormal endoscopic findings of upper GIT. The most common cause of UGI bleeding was due to PUD which was 31 (43.1%) cases followed by varices (34.7%), gastric cancer (12.5%) and gastro-duodenitis (8.3%). In another study it has been reported that dysphagia may be caused by a variety of upper GI conditions, ranging from benign to malignant; these conditions include neuromuscular or structural disorders causing dysmotility either in the oropharynx or oesophagus. Endoscopy of upper GIT is safe and can be performed even without sedation or anesthesia in adult patients[14]. No immediate post procedure complications were noted in the study.

Conclusion:

The most common endoscopic findings are the PUD, varices with or without gastropathy, gastric cancer, esophageal cancer and gastritis with or without duodenitis. There was no complication of endoscopy was reported.

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