

UPPER GASTROINTESTINAL ENDOSCOPY: INDICATIONS AND OUTCOME

Experience at Sheikh Zayed Hospital Rahim Yar Khan

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ABSTRACT

Background: Upper Gastrointestinal (UGI) complaints are very important medical complaints both in outdoor and indoor patients. Upper GI endoscopy is the most important diagnostic as well as therapeutic tool in diagnosing these complaints. **Objectives:** The objective of the study was to document various indications of referral for UGI endoscopy and to determine endoscopic findings in these patients. **Methods:** All consecutive patients referred for endoscopy from November, 2005 to April, 2008, were included in the study. Demographic features, reasons for referral and endoscopic diagnosis were noted. **Results:** Among 1000 patients, 59 % were referred due to upper GI bleeding, 7 % due to dysphagia, 7 % due to persistent vomiting and 4.6 % due to dyspeptic symptoms. Common endoscopic diagnoses were esophageal varices (43 %), reflux esophagitis (9 %), gastritis (5 %) and gastric ulcer (3%). **Conclusion:** The most common presenting complaint was upper GI bleeding and the most common endoscopic finding was esophageal varices.

Key words: Upper GI endoscopy, Esophageal varices, Incidence.

INTRODUCTION

Upper Gastrointestinal (UGI) complaints are very common, both in indoor and outdoor practice. Sometimes, they create great diagnostic difficulty. In many centers, UGI endoscopy has become the initial and usually sole diagnostic approach to unexplained UGI symptoms.

UGI bleeding is a global problem and common medical emergency.¹ The causes of bleeding vary from country to country. Commonest causes are esophageal varices, peptic ulcer, gastric erosions and mucosal tears.^{2,3} UGI endoscopy is the diagnostic modality of choice for UGI bleeding⁴ and it also has therapeutic potential. In addition to bleeding, obstructive lesions like carcinoma esophagus and stomach, strictures of esophagus, hiatal hernias and gastropathies are also common endoscopic findings.

Sheikh Zayed Medical College/Hospital is a tertiary care hospital. It has a very large referral area from Southern Punjab, and adjoining areas of Sindh and Balochistan. The objective of the study was; to document various indications of referral for UGI endoscopy and to determine endoscopic findings in these patients.

PATIENTS AND METHODS

All the consecutive patients who reported in endoscopy unit for UGI endoscopy; either referred from inpatient, outpatient or accident & emergency departments were included in the study, from November 2005 to April 2008. A written informed consent was taken from every patient before the procedure. Procedures were done with Olympus GIP type E3 gastroscope. Local anesthetic, 4 % xylocaine solution, was used for gargles before the procedures. Midazolam IV was given to anxious non-cirrhotic patients. For obliteration of esophageal varices, 70 % alcohol was used as sclerosing agent and band ligation was done with Saeed Six Shooter multiple band ligator. All those patients who did not give written informed consent were excluded from study. Additionally, the patients who had any contraindications to endoscopy were also excluded.

Parameters recorded were age and sex of the patients, indications for endoscopy, endoscopic diagnosis, and the types of therapeutic intervention. The data was entered in SPSS Version 10 software. The quantitative data was recorded as mean and standard deviation and qualitative data as percentage.

RESULTS

In this study, out of 1000 patients, who underwent upper GI endoscopy, 610 (61 %) were male and 390 (39 %) were female. The mean age of the patients was 43.27 ± 16.58 years with the range of 6 to 95 years. Five hundred and thirty patients were referred from inpatient departments, 392 from Outpatient and 78 from Accident and Emergency departments.

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The most common indication of referral for endoscopy was upper gastrointestinal (UGI) bleeding (59%), followed by dysphagia, persistent vomiting, surveillance of esophageal varices, 7% each, (Table I) and the most common endoscopic diagnosis was esophageal varices(43%), followed by normal findings (18%), gastroesophageal reflux disease (9%), gastritis (5%) and gastric ulcer (3%). (Table II).

Table I: Common indications for UGI endoscopy

Indications	No	% age
Upper gastrointestinal bleeding	589	58.9
Dysphagia	74	7.4
Persistent vomiting	72	7.2
Surveillance for esophageal varices	72	7.2
Follow-up sclerotherapy or band ligation	55	5.5
Dyspepsia	46	4.6

Table II: Common endoscopic diagnoses

Diagnoses	No	%age
Esophageal varices	432	43.2
Normal	184	18.4
Gastroesophageal reflux disease	95	9.5
Gastritis	49	4.9
Gastric ulcer	33	3.3
Duodenal ulcer	25	2.5
NSAID-induced gastropathy	25	2.5
Esophageal ulcer	22	2.2
Esophageal carcinoma	21	2.1
Benign esophageal stricture	20	2.0
Mallory-Weiss tear	19	1.9

Among 589 patients presenting with UGI bleeding, 337 (57.2 %) had esophageal varices, 46 (7.8 %) had gastroesophageal reflux disease (GERD), 30 (5 %) had gastric ulcer, 22 (3.7 %) had NSAIDs-induced gastric erosions, 19 (3.2 %) had Mallory-Weiss tear and 19 (3.2 %) had

duodenal ulcer. Seventy one (18 %) patients had normal endoscopic findings.

The common causes of dysphagia were carcinoma of esophagus (27 %), benign esophageal stricture (27 %), GERD (16 %) and achalasia (8 %). Nine patients (12 %) presenting with dysphagia had normal endoscopic finding. The endoscopic procedure was diagnostic in 628 (62.8 %) patients and therapeutic intervention was carried out in 372 (37.2 %) patients. Therapeutic procedures included sclerotherapy in 220 (22 %) and endoscopic variceal band ligation in 146 (14.6 %) patients.

DISCUSSION

Sheikh Zayed Medical College / Hospital is a newly established institution providing medical care to vast rural areas of Southern Punjab, upper Sindh and Balochistan. Thus our results reflect attitudes towards utilizing invasive diagnostic facilities, trends of referral, and prevalence of various diseases for which diagnostic and therapeutic UGI endoscopy is required. Endoscopic services in our institution are provided only to adults and older children, as we do not have pediatric endoscopes. Additionally, at present, we do not provide emergency endoscopic services during evening and night. Age and sex ratio of our patients was a reflection of outdoor consultation and indoor admission patterns regarding these parameters and was similar to those of studies from other parts of our country.⁵

An early endoscopy in cases of UGI bleeding has considerably altered the older concept of the causes of bleeding but the consequences of the events have remained the same. In a prospective study of 1000 cases by Jutabha R, of UGI bleeding it was observed that peptic ulcer was the most common cause (55 %) followed by esophageal varices (14 %).⁶ In another data, peptic ulcer disease was responsible for only 21 % of episodes of UGI bleeding and esophageal varices for 12 % of episodes.⁷ Non-specific mucosal abnormalities were the commonest cause of bleeding in this series. In our study, esophageal varices were the most common cause (57 %), followed by peptic ulcer disease (8 %), reflux esophagitis and NSAIDs-induced gastric erosions.

Our results are comparable with studies conducted in Pakistan.⁸⁻¹³ The high incidence of esophageal varices was due to the high rate of chronic infection with Hepatitis C and Hepatitis B leading to end stage liver disease.

Gastric ulcers were more common as compared to duodenal ulcers and this finding is similar to that seen in studies conducted in Western countries^{6, 7} though a local case series gave an opposite result.⁸ Lower incidence of peptic ulcer as a cause of bleeding could be due to frequent use of acid suppressing drugs by medical practitioners in patients with symptoms of dyspepsia. Alcohol consumption appeared to play little role as a cause of UGI bleeding in this population, most likely due to religious prohibition of alcohol in the society. The frequency of normal endoscopy in patients presenting with UGI bleeding varies from 9 to 21 % between different studies¹⁴ and it was 18 % in our study. Tumors of upper GI tract are less common in our study and similar data is shown by local studies.⁹

CONCLUSION

Upper GI endoscopy is the only reliable tool for correctly determining the etiology of upper GI complaints and it also has therapeutic potential. Upper GI bleeding is the most common reason for referral to endoscopic unit and esophageal varices form the major bulk of endoscopic findings reflecting high prevalence of chronic liver disease.

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