

Upper GI Endoscopy - A review of 500 cases at Sheikh Zayed Medical College/Hospital Rahim Yar Khan

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ABSTRACT

Objective: To document various endoscopic findings in patients undergoing upper GI endoscopy in our endoscopy unit

Design: Observational

Patients and methods: The data of 500 patients who underwent upper GI endoscopy in Endoscopy Unit of Sheikh Zayed Medical College/Hospital from November 2005 to May 2007 was analyzed. Demographic features, reasons for referral and endoscopic diagnoses were noted.

Results: Among 500 patients, 57% were referred due to upper GI bleeding, 9% due to dysphagia, 8 % due to persistent vomiting and 7% due to dyspeptic symptoms. Common endoscopic diagnoses were esophageal varices (44%), reflux esophagitis (9%), gastritis (4%) and gastric ulcer (4%).

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, dysphagia

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 emergency¹. 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 has recently been established. It has a very large referral area from Southern Punjab, and adjoining areas of Sindh and Balochistan. The objective of the study was to find out common reasons of referral for UGI endoscopy in the endoscopy unit of this institution, demographic features of referred patients and common endoscopic diagnoses.

PATIENTS AND METHODS

The data of first 500 patients who underwent UGI endoscopy in our endoscopy unit from November 2005 to May 2007 was scrutinized.

Patients were referred from inpatient, outpatient and accident & emergency departments.

A written informed consent was taken from every patient before the procedure. Olympus GIP type E3 gastroscope was used and all procedures were done by a single operator (I.A.). 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.

Parameters recorded were age and sex of the patients, indications for endoscopy, endoscopic diagnoses, and the types of therapeutic intervention.

The data was entered in SPSS 10 software. The quantitative data was recorded as mean and standard deviation and qualitative data as percentage.

RESULTS

Of 500 patients undergone upper GI endoscopy, 316(63%) were male and 184(37%) were female. The mean age of the patients was 42.45±16.52 years. The patients were mainly between 30 and 50 years of age. Two hundred and sixty five patients were referred from Inpatient departments, 196 from Outpatient and 39 from Accident and Emergency departments.

The common indications for endoscopy are shown in Table I. Other indications were iron deficiency anemia in 13(2.6%) patients, pain epigastrium in 9(1.8%), chronic diarrhea in 6(1.2%), weight loss in 5(1.0%), odynophagia in 2(0.4%), hematochezia in 1(0.2%), anorexia in 1(0.2%) and atypical chest pain in 1(0.2%) patient.

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The common endoscopic diagnoses are shown in Table II. Other diagnoses were esophageal ulcer in 10(2.0%) patients, carcinoma stomach in 7(1.4%), portal hypertensive gastropathy in 6(1.2%), carcinoma duodenum in 5(1.0%), achalasia in 5(1.0%), pyloric stenosis in 4(0.8%), extrinsic pyloric compression in 3(0.6%), celiac disease in 3(0.6%), fundal varices in 2(0.4%), esophageal candidiasis in 2(0.4%), bleeding diathesis in 1(0.2%) and carcinoma pharynx in 1(0.2%) patient.

The endoscopic procedure was diagnostic in 316(63.2%) patients and therapeutic intervention was carried out in 184(36.8%) patients. Therapeutic procedures included sclerotherapy in 97(19.4%) and endoscopic variceal band ligation in 87(17.4%) patients.

Table I: Common indications for UGI endoscopy

Indications	No	%age
UGI bleed	287	57.4
Dysphagia	46	9.2
Persistent vomiting	39	7.8
Dyspepsia	35	7.0
Follow-up sclerotherapy or band ligation	31	6.2
Surveillance for esophageal varices	24	4.8

Table II: Common endoscopic diagnoses

Diagnoses	No	%age
Esophageal varices	218	43.6
Normal	82	16.4
Gastroesophageal reflux disease	47	9.4
Gastritis	21	4.2
Gastric ulcer	20	4.0
Esophageal carcinoma	14	2.8
NSAID-induced gastropathy	13	2.6
Mallory-Weiss tear	12	2.4
Benign esophageal stricture	12	2.4
Duodenal ulcer	12	2.4

DISCUSSION

Our hospital is a budding medical college hospital providing medical facilities to vast areas of Southern Punjab, upper Sindh and adjoining Balochistan, so 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, in this part of our country. We provide endoscopic services to patients who are adults and older children as we do not have pediatric endoscopes. At present, we do not provide emergency endoscopic service 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 country⁵.

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 series of 1000 cases of UGI bleeding, 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 episodes⁷. Non-specific mucosal abnormalities were the commonest cause of bleeding in this series. In our study, esophageal varices were the most common cause (58%), followed by peptic ulcer disease (11%), esophagitis and NSAIDs-induced gastric erosions.

Our results are comparable with studies conducted in Pakistan⁸⁻¹³. 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 11% in our study. Tumors of upper GI tract are less common in our study, but similar data is shown by local studies⁹.

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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