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Research Article

Endoscopic Findings in Patients Presenting with Upper Gi Bleeding

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Abstract

Background and Aims: Upper GI bleeding is one of the commonest emergencies in gastroenterology having high morbidity and mortality. It has multiple causes from mild to severe outcome. The aim of this study was to evaluate endoscopic finding in patients presenting with upper GI bleeding.

Methods: This is retrospective study which was conducting in police and services hospital and Khyber teaching hospital Peshawar from February 2021 to november 2021. All the patients presenting with upper GI bleeding was evaluated and reviewed along with their records. Data were analysed and entered using SPSS 20.

Results: Total number of patients were 430(225 males and 205 females) who underwent endoscopy presenting with upper GI bleeding. Main age of study population was 52 years with standard deviation of 15 years. Age of the youngest was 15 years while that of oldest was 85 years. More than half of the patients 224 (52%) were in between 41 to 60 years. The commonest endoscopic finding was esophageal varices 224 (52%), followed by portal hypertensive gastropathy 64 (15%), erosive gastritis 43(10%) and fundal varices 34(8%), and. Esophageal varices, gastropathy, gastric ulcers and upper GI malignancies were more in male patients as compared to female patients (p = 0.039) presenting with upper GI bleeding. While portal hypertensive Gastropathy, erosive esiphagitis and gastric ulcer were more present in female patients. Variceeal bleed has having greater dominancy in middle age group (p = 0.000). Whereas erosive gastritis, gastric ulcer, and gastric erosions were more present in increased frequency in older (>65 years) UGIB patients (p = 0.000).

Conclusion: UGIB was in higher frequncy in male patients as compared to females. In our study, esophageal variceal was the major cause of UGIB in this southasian countries while duodenal ulcer bleed was not as common as it is present in other parts of the world. Variceal bleeding was significantly associated with male patients having middle age groups While bleeding from duodenal ulcer was highly associated with older ages.

Keywords: Endoscopic; Gi Bleeding; UGIB; Patients Presenting

Introduction

Upper gastrointestinal bleeding (UGIB) is one of the commonest gastrointestinal emergency presenting in ER having high morbadity and mortality, and associated with high burden of health care resources [1]. Population-based statistical data is important to get insight into the actual burdon on health care resources.Upper GI bleed has many causes in different parts of the world. Epidemiological data are helpful in knowing the burden of the problem, the etiology, morbidity and mortality associated with it. Recent advances in medical treatment has changed the dynamics, ethiology and treatment of UGIB. There are very few studies which have been done in Pakistan regarding etiology, morbidity and mortality of GI

bleed. In Western countries, bleeding from peptic ulcer disease is still the predominant cause of UGIB [1,4]. recent studies showing after advancment in medical reseach mortality and rebleeding rates are going down [1,2]. However, some data have denied these facts [3]. These data shows that both mortality and morbidity remained unchanged due to upper GI bleed [4].

There are some other causes of UGIB as well but in very few patients. These include angiodysplasia, aorto-enteric fistula,Dieulafoy's lesions, and hemobilia etc. Varecial bleed is a major culprit of UGIB associated with high morbidity and mortality. Esophageal varices are usually present in lower esophagus. Varices are usually found in portal hypertension as abnormal dilatation of submucosal veins in cirrhosis-related complication of portal hypertension[5]. In countries like asia and specially south asia, esophageal variceal bleed is the commenst and deadly cause of UGIB [6,7]. In contrast to other parts of the world like west. where peptic ulcer disease is number one cause of upper GI bleed. In our study, we have analyzed data of patients with acute UGIB retrospectively noted the cause, clinical presentation, morbadity and mortality related with GI bleed.

Materials and Methods

This was a retrospective study. data of 430 patients who were admitted to police and services hospital and khyber teaching hospital from february 2021 to november 2021 with UGIB. The study was approved respective Ethical Committee. Patients having age of > 14 years were included. Hematemesis and melena were the main symptoms of upper GI bleeding. Data was analyzed based on baseline clinical information, laboratory tests, blood unit tranfusions, endoscopy records and findings.

Demographics data (age, gender) and endoscopic findings were noted and analyzed. Data were then entered into SPSS. Statistical data analysis was performed with chi-square. Statistical significance was determined at $p < 0.05$. analysis of information was done according to age and endoscopic diagnosis and presented in table forms.

Results

In our study, 430 patients presenting with UGIB, in those 225 (52.3%) were males and 205 (47.7%) were females. Male to female ratio was 1.09:1. Mean age was 52 years having standard deviation of 15 years. Males mean age was 49 years while females mean age was 50 years. Age of the youngest patient presented was 15 years while 85years was oldest patient was 85 year. Majority of patients belonged to the fifth decade. About half of the patients 224(52%) having UGIB were having age between 41-60 years.

Characteristics	N%
Age(years)	
mean	52
Standard deviation	15
Range	14-85
Gender	
male	225(52.3%)
female	205(47.7%)
Age group(years)	
< 40	100(23.2%)
41-60	224(52%)
> 60	106(24.7%)

Table 1: Demographic features in patients presenting with upper GI bleeding.

Endoscopic findings	Total%
Esophageal varices	224(52%)
gastropathy	64(15%)
gastritis	43(10%)
Fundal varices	34(8%)
Duodenal ulcer	17(4%)
Esophageal ulcer	15(3.4%)
Gastric ulcer	10(2.3%)
Gastric erosion	8 (1.86%)
duadenitis	6(1.39%)
Gastric tumor	4(0.93%)
Esophageal erosions	2(0.46%)
esophagitis	1(0.23%)
Dieulefoy, s lesion	1(0.23%)
Esophageal tumor	1(0.23%)

Table 2: Endoscopic findings distribution is patients presenting with upper GI bleeding.

Table 2 shows the endoscopic findings in patients of UGIB in our study. esophageal varices was the predominant findings on endoscopy occuring in more than 50% of the patients admitted with UGIB 52% (n = 224). portal hypertensive gastropathy was on 2nd number after esophageal variceal bleed diagnosed in 64 (15%)

patients. There were some other minor causes of upper GI bleed, in decreasing order of frequency by erosive gastritis (43, 10%), fundal varices (34, 8%), duodenal ulcer (17, 4%) and other very rare causes (Table 2). If we compare distribution of endoscopic findings according to gender, esophageal varices, erosive gastritis, gastric ulcers and upper GI malignancy were more present in male patients as compared to female patients presenting with upper GI bleed. Portal hypertensive Gastropathy, erosive esophagitis and peptic ulcer were more likely to be present in female UGIB patients.

Discussion

In our study, mean age of presentation was of 52 years which is on lower side as compared to western countries mean age of UGIB patients [7,8]. This also shows high rate of aged population in western parts. In our study, UGIB was more commonly diagnosed in male patients when compared to females, having a male to female ratio of 1.09:1. This was comparable to the data reported in western studies in which male patient ratio was greater than females [2,9]. The commonest cause of UGIB found in this study was upper GI bleeding secondary to esophageal varices (52%). It was followed by other causes like portal hypertensive gastropathy, gastritis, gastric erosions and peptic ulcer. Peptic ulcer is more common in west as compared to east than esophageal varices. the diagnosis of peptic ulcer (gastric and duodenal ulcer) as cause of GI bleed were found in 6.3% of patients in our study which is very low as compared to west. Other local and international studies shows the exact results as well[10,12]. In contrast to our study findings, several other studies showed peptic ulcer disease as the commonest culprit of UGIB [13,16]. High number of esophageal varices in south asian people like India and Pakistan is mainly due to the high prevalence of viral hepatitis (Hepatitis B and C) related cirrhosis. Comparable results to our study are also found in other local studies as well. In a local study, 53% of cases had esophageal varices and 20% had peptic ulcer disease [17]. In our study, portal hypertensive gastropathy was the second most common cause of UGIB while in another local study, 64% of cases had esophageal varices and gastric erosions were the second most common cause, i.e., erosive gastritis 15% and PUD 10% of cases [18]. There were some limitations in our study. As our study was carried out at a tertiary care centre, it may not be representative of the general population. Many patients with milder symptoms may not report to the hospital. Another important thing is that as our hospital is a government run setup, patients mostly belonging to low socioeconomic status come here. Multicenter studies targeting clinics providing EGD services should also be taken into account in future studies to further improve our understanding of different etiologies of UGIB.

Conclusions

It is very essential to have a basic understanding of different conditions causing UGIB. Our study showed that patients presenting with UGIB was more prevelant in male patients. esophageal variceal bleed was the major significant cause of UGIB and peptic ulcer bleed was was not as common when compared to the western parts. Esophageal varices, erosive gastritis, peptic ulcers and upper GI malignancies were predominantly found in male UGIB patients. Conversely, female patients presenting with UGIB, portal hypertensive gastropathy, erosive esophagitis and gastric ulcer were major findings on EGD. Esophageal variceal bleeding was mainly a diagnosis in middle age patients. While erosive gastritis, peptic ulcer, gastric erosions and peptic duodenitis were more present in older patients as compared to older patients.

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