ORIGINAL ARTICLE

Causes of Bleeding In Upper Gastrointestinal Tract Detected on Endoscopy

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ABSTRACT

Background: Hematemesis is the commonest presenting symptoms in acute conditions and Melena in chronic conditions of UGI bleeding. The earlier said condition is generally appears as a result of bleeding from tract of upper gastrointestinal whereas the proximal site of bleeding cause hematemesis, though right-sided colonic and small bowel lesions can occasionally be responsible. The primary of the study was to assess the causes of upper GI bleeding on endoscopy.

Methods: The study design opted for the present research was observational cross section, The exclusion criteria include all patients with severe respiratory disease, Myocardial infection or any other heart disease and sever shocks whereas all the patients of both genders above 18 years of age presenting with melena or hematemesis were included in this study. Firstly the patient was observed through physical examination for detailed history that includes demographic as well as diagnostics like complete blood counts (CBC), serology for hepatitis, ultrasound and bleeding profile. Standard operating procedures (SOP) were followed and practiced for ECG, X-Ray & upper GI endoscopy.

Results: A total of 80 patients were enrolled for this study. The mean age of the patients was 54±8.9 with range 18-70. 16(20%) of the patient were in the age category of 18 to 39. Whereas 28(35%) belong to 40-55 and 36(45%) were above and equal 56 years of age. 52(65%) of the patients were male and 28(35%) were females. The male to female ratio is 2:1. The leading cause of the UGI bleeding is varices followed by gastric ulcer in the local population.

Conclusion: We may conclude in our study that most of the patients with presenting symptoms of Melena and leading cause of vertices followed by gastric ulcer.

Keywords: Upper gastrointestinal bleeding (UGIB), mortality & morbidity, pharmacologically,

INTRODUCTION

In gastroenterology clinics and medical units the upper gastrointestinal (UGI) bleeding is a common presentation that results in considerable morbidity, mortality, and medical care expenses. The causes behind is multifactorial and varies across the regions of the world[1,2]. Almost half million patients reported with UGI bleeding were admitted to the hospitals every year[3]. The mortality among these patients is 30000 per year[4,5]. Hematemesis is the commonest presenting symptoms in acute conditions and Melena in chronic conditions[6]. The earlier said condition is generally appears as a result of bleeding from tract of upper gastrointestinal whereas the proximal site of bleeding cause hematemesis, though right-sided colonic and small bowel lesions can occasionally be responsible[7]. It is published that the mortality increases with increase in age and this increases with the patients who are hospitalized with comorbidity[8]. The treatment to UGI bleeding can be endosopically and pharmacologically. The progression in treatment era; the UGI bleeding for endoscopy mortality and morbidity has remarkably decreased[9,10]. The endoscopy can also shorten the hospitalization stay and ultimately its cost[11]. The leading causes for the UGI bleeding are variceal, portal hypertension and ulcer (gastric, peptic etc.) in Pakistan[12]. The primary of the study was to assess the causes of upper GI bleeding on endoscopy.

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MATERIAL AND METHODS

The study design opted for the present research was observational cross section, where patients with GI bleeding were assessed during endoscopy. The study duration was of six months. The venue of the study was medical units of mayo hospital, Lahore . The exclusion criteria include all patients with severe respiratory disease, Myocardial infection or any other heart disease and sever shocks whereas all the patients of both genders above 18 years of age presenting with melena or hematemesis were included in this study. Firstly the patient was observed through physical examination for detailed history that includes demographic as well as diagnostics like complete blood counts (CBC), serology for hepatitis, ultrasound and bleeding profile.

Standard operating procedures (SOP) were followed and practiced for ECG, X-Ray & upper GI endoscopy. An informed consent was taken from the patients or attendant of the patient. Ethical consideration was taken in to account by taking approval Hospital ethical Committee.

Statistical analysis: All the collected data was stored electronically & analyzed later by using SPSS version 20. Descriptive statistics were applied to calculate mean and standard deviation. Frequency distribution and percentages were calculated for qualitative variables like gender, gastric ulcer etc. Over all a P values less than 0.05 was considered statistically significant.

RESULTS

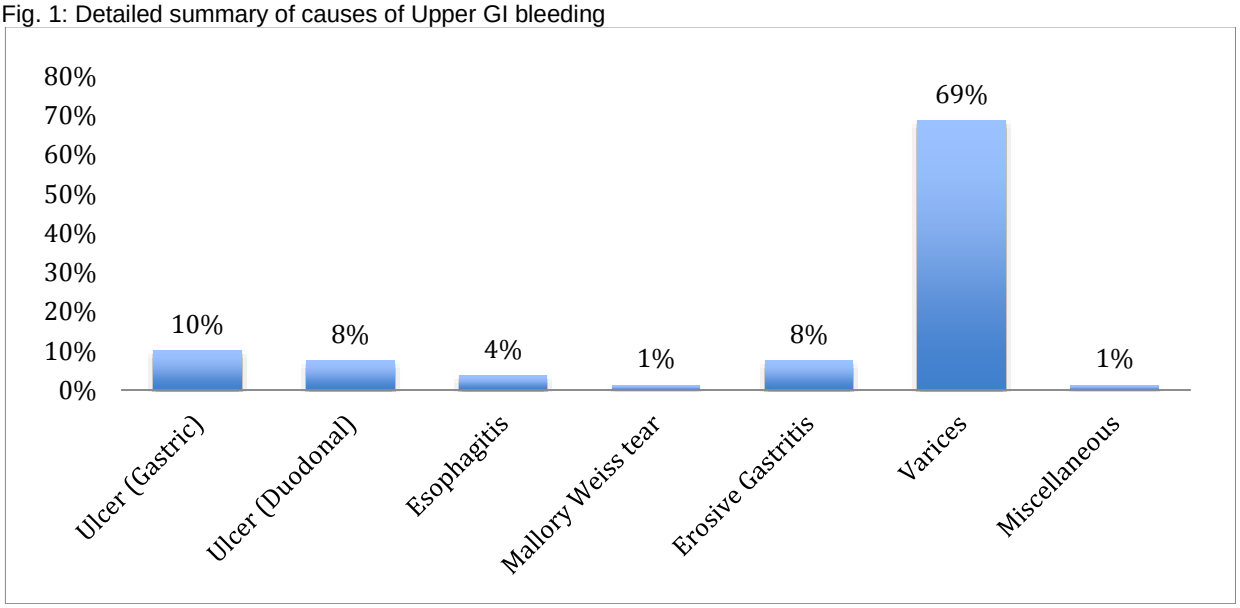
A total of 80 patients were enrolled for this study. The mean age of the patients was 54±8.9 with range 18-70. 16(20%) of the patient were in the age category of 18 to 39. Whereas 28(35%) belong to 40-55 and 36(45%) were above and equal 56 years of age. 52(65%) of the patients were male and 28 (35%) were females. The male to female ratio is 2:1. More of the patients' characteristics were given in table 1.

Table 1: The baseline characteristics of HE patients.

Characteristic	**n(%)**
N	80
Mean Age +SD	54±8.4
Male to female Ratio	2:1
Symptoms of Melena	52 (65%)
Symptoms of Hematemesis	15 (18.7%)
Presenting symptoms of Both	13(16.3%)

These symptoms were also assessed among various age groups. 8(50%) of the patients were presented with Melena in age group of 18-39, 18(64.3%) in 40-55 and 22(61.1%) in the age of 56 or above. We did not observed any significant relation between age and presenting symptoms. More on the causes of upper GI bleeding was observed in figure 1.

Fig. 1: Detailed summary of causes of Upper GI bleeding



DISCUSSION

The study was conducted to assess the causes of upper GI bleeding on endoscopy. We not only report various causes but also observed its distribution among various age groups. We observed in our findings that more the males are affected with GI bleeding than females; the male to female ratio observed in our study is similar to the other published studies[13,14]. We reported in our study various causes of the UGI bleeding which includes, varices, ulcer (gastric & duodenal), gastritis, esophagitis, Mallory Weiss tear and miscellaneous were presented in our population with different percentages. The presenting percentages were also supported by other published studies. We have found in our study that the most common cause is esophageal varices and gastric ulcer. These findings are different from the studies published in west[14,15]. In one of the study conducted by Barkun et al, the majority of UGI bleeding was due to non-variceal reasons; they observed the peptic ulcer at top of the cause for UGI bleeding[14]. Our study results are incorporated with the studies conducted and published in various developing countries like Kenya where the leading cause for UGI bleeding is varcies[16]. This was also supported by another published study conducted in Pakistan where

the varices presented in almost 44% of the patients, other causes includes gastric ulcer and esophageal ulcer with certain percentages which are similar to our study findings[6,7,8,9]. We observed in our study most of the cases were with presenting symptoms of Melena. This finding is supported by other published studies[14,15,16]. This study is an effort to enhance and enlighten the need of further research in this era to control the UGI bleedings during endoscopy.

CONCLUSIONS

We may conclude in our study that most of the patients with presenting symptoms of Melena and leading cause of vertices followed by gastric ulcer.

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