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Original Research Article

ASSESSMENT OF CLINICAL PROFILE AND ENDOSCOPIC PROFILE OF PATIENTS WITH UPPER GASTROINTESTINAL BLEED

Dr. Munesh Kumar[1], Dr. Sandeep Kothari[2], Dr. Prahlad Dhakar[3], Dr. Sunil Gupta[4]

1,3. Assistant Professor, Department of Medicine, RUHS College of Medical Sciences, Jaipur, India 2. Assistant Professor, Department of Anaesthesiology, RUHS College of Medical Sciences, Jaipur, India 4. Assistant Professor, Department of Biochemistry, RUHS College of Medical Sciences, Jaipur, India
*Corresponding author – **Dr Sandeep Kothari**
Email id –doc.sandeep.kothari@gmail.com

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ABSTRACT

Background: Upper gastrointestinal bleeding is reported as a common medical emergency around the globe. UGIB refers to bleeding from the stomach, esophagus, or duodenum. Patients generally presented with hematemesis or melena; however, hematochezia can also present in the cases of major bleeding. Previous studies reported that higher incidence of mortality rates in the patients presented with hematemesis than patients presented with melena. **Material & Methods:** The present prospective observational study was conducted at the Department of Medicine at tertiary care hospital. A sample size of 100 was calculated at a 95 % confidence interval at a 10 % acceptable margin of error by epi info software version 7.2. Patients were enrolled from the outpatient department and ward by simple random sampling. Clearance from Institutional Ethics Committee was taken before the start of the study. **Results:** In the present study, among the total study participants the most common presentation was in form of both hematemesis and Malena (46%), which was followed by hematemesis (36%) whereas only 18% of patients presented with complaint of Malena alone. Based on the endoscopic profile of patients with upper GI bleeding among the total study participants, the most common cause of upper gastrointestinal bleeding was portal hypertension leading to esophageal and/or gastric varices (52%), which was followed by peptic ulcer (17%), which was followed by erosive gastro-duodenitis (14%), which was followed by Mallory weis tear (5%) and gastrointestinal malignancy (2%). No endoscopic lesion could be identified in 10% of patients with upper gastrointestinal bleeding. **Conclusion:** We concluded from the present study that based on the endoscopic profile of patients with upper GI bleeding the most common cause of upper gastrointestinal bleeding was portal hypertension leading to esophageal and/or gastric varices which were followed by peptic ulcer.

Keywords:: Upper gastrointestinal bleeding, endoscopic intervention, hematemesis.

INTRODUCTION

Upper GI endoscopy can productively help both in providing therapeutic intervention and giving diagnosis in different gastrointestinal problems (1). The most common gastrointestinal disorders which require endoscopic intervention in the present clinical scenario are upper gastrointestinal bleeding (UGIB) and assessment of non-responding dyspepsia (2). Various studies reported that upper gastrointestinal bleeding has a mortality rate of approximately 5% to 11%, which implies significant life-threatening morbidity. Early endoscopic intervention may not only help in diagnosing the etiology for upper gastrointestinal bleeding but also additionally helps in early therapeutic intervention and reducing the duration and costs of hospitalization (3).

Upper gastrointestinal bleeding is reported as a common medical emergency around the globe. UGIB refers to bleeding from the stomach, esophagus, or duodenum (4). Patients generally presented with hematemesis or melena; however, hematochezia can also present in the cases of major bleeding. Previous studies reported that higher incidence of mortality rates in the patients presented with hematemesis than patients presented with melena (5). Previous studies reported that numerous risk factors for

high mortality rates in cases of UGIB, including advanced age and major medical comorbidities. However, various medical therapeutic improvements have been incorporated into clinical practice for the management of upper gastrointestinal bleeding (6).

However, the cause of upper gastrointestinal bleeding is uncertain until endoscopy is undertaken because the management and outcomes guidelines often separate upper gastrointestinal bleeding into variceal and non-variceal bleeding (7). Hence the present study was conducted to assess the clinical profile and endoscopic profile of patients with upper gastrointestinal bleed at our tertiary care center.

MATERIALS & METHODS

The present prospective observational study was conducted at the Department of Medicine at tertiary care hospital. The study duration was September 2015 to March 2016. A sample size of 100 was calculated at a 95 % confidence interval at a 10 % acceptable margin of error by epi info software version 7.2. Patients were enrolled from the outpatient department and ward by simple random sampling. Clearance from Institutional Ethics Committee was taken before the start of the study. Written informed consent was taken from each study participant.

All the patients who were given consent irrespective of age and gender were included in the study design. The demographic details and clinical history, including the history of GI bleed, associated risk factors, history of non-steroidal anti-inflammatory drugs, anti-platelet, and associated comorbid diseases, endoscopy result, treatment is given and length of hospital stay was recorded for each study participant. Clinical and endoscopic data of all patients were collected and analyzed. Patients of UGIB were presented with both hematemesis and/or Malena based on history. In the present study clinically and hemodynamically unstable patients were excluded.
Data analysis was carried out using SPSS v22. All tests were done at an alpha (level significance) of 5%; means a significant association present if the p-value was less than 0.05.

RESULTS

In the present study, we enrolled 100 patients with upper gastrointestinal bleeding who presented with both hematemesis and/or Malena based on history. The study included 100 patients with an average age of 45.7 years with 74 patients male and 26 patients' female patients with an average BMI of 26.3 kg/m2. Out of the total study participants, 51 % had a positive history of alcohol use and 28% had a positive history of NSAID use at the time of GI bleeding episode. Out of the total study participants, 8% had a positive history of both alcohol and NSAID use at the time of GI bleeding episode. (Table 1)

Table 1: Distribution of study subjects according to the study parameters.

Age	Mean 45.7 Years
Sex	
Male	74 patients
Female-	26 patients
Body Mass Index(kg/m2)	Mean -26.3 kg/m2
Alcohol use history	51 %
NSAID history	28 %
Alcohol + NSAID	8%

In the present study, among the total study participants, the most common presentation was in form of both hematemesis and Malena (46%), which was followed by hematemesis (36%) whereas only 18% of patients presented with complaint of Malena alone. (Table 2).

Table 2: Clinical profile of patients with upper GI bleeding.

Parameter	No. of Patients
Hematemesis	36
Malena	18
Hematemesis + Malena	46

Table 3: Distribution of study subjects according to the endoscopic profile of patients with upper GI bleeding.

Final diagnosis	No. of Patients
Normal	10
Portal HTN related (esophageal and gastric varies)	52
Erosive gastroduodenitis	14
Gastric ulcer	9
Duodenal ulcer	8
Mallory weis tear	5
Gastrointestinal malignancy	2

In the present study, based on the endoscopic profile of patients with upper GI bleeding among the total study participants the most common cause of upper gastrointestinal bleeding was portal hypertension leading to esophageal and/or gastric varices (52%), which was followed by peptic ulcer (17%), which was followed by erosive gastro-duodenitis (14%), which was followed by

Mallory weis tear (5%) and gastrointestinal malignancy (2%). No endoscopic lesion could be identified in 10% of patients with upper gastrointestinal bleeding. (Table 3).

DISCUSSION

In the present study, we enrolled 10 patients with upper gastrointestinal bleeding who presented with both hematemesis and/or Malena based on history. The study included 100 patients with an average age of 45.7 years with 74 patients male and 26 patients' female patients with an average BMI of 26.3 kg/m2. Out of the total study participants, 51 % had a positive history of alcohol use and 28% had a positive history of NSAID use at the time of GI bleeding episode. Out of the total study participants, 8% had a positive history of both alcohol and NSAID use at the time of GI bleeding episode. Similar results were obtained in a study conducted by Garg D et al among 1124 patients of upper gastrointestinal bleeding presented with both hematemesis and/or Malena based on history. They reported the age ranged from 18 to 84years, the mean age being 47.87 years. Total 886 (78.3%) patients were males (8). Similar results were obtained in a study conducted by Sarwar S et al among 402 patients of upper gastrointestinal bleeding presented with both hematemesis and/or Malena based on history. They reported the mean age being 52.57 years and male to female ratio was 2:1 (9).

In the present study, among the total study participants, the most common presentation was in form of both hematemesis and Malena (46%), which was followed by hematemesis (36%) whereas only 18% of patients presented with complaint of Malena alone. Similar results were obtained in a study conducted by Singh S et al among patients of upper gastrointestinal bleeding presented with both hematemesis and/or Malena based on history. They reported that non-steroidal anti-inflammatory drug ingestion was reported in 8% of cases. Melena was the commonest mode of presentation (10). Similar results were obtained in a study conducted by Anand P et al among patients of upper gastrointestinal bleeding presented with both hematemesis and/or Malena based on history. They reported that alcohol and non-steroidal anti-inflammatory drug ingestion was reported in cases of UGIB (11).

In the present study, based on the endoscopic profile of patients with upper GI bleeding among the total study participants the most common cause of upper gastrointestinal bleeding was portal hypertension leading to esophageal and/or gastric varices (52%), which was followed by peptic ulcer (17%), which was followed by erosive gastro-duodenitis (14%), which was followed by Mallory weis tear (5%) and gastrointestinal malignancy (2%). No endoscopic lesion could be identified in 10% of patients with upper gastrointestinal bleeding. Similar results were obtained in a study conducted by Rao T et al among patients of upper gastrointestinal bleeding presented with both hematemesis and/or Malena based on history. They reported similar results to the present study (12).

CONCLUSION

We concluded from the present study that based on the endoscopic profile of patients with upper GI bleeding among the total study participants the most common cause of upper gastrointestinal bleeding was portal hypertension leading to esophageal and/or gastric varices which were followed by peptic ulcer.

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