DOI: https://doi.org/10.53350/pjmhs22161104

ORIGINAL ARTICLE

Frequency of Gastric Varices in patients presenting with upper gastrointestinal bleed

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ABSTRACT

Aim: To establish the frequency of gastric varices in patients presenting with upper GI bleed.
Study design: Descriptive cross sectional study.
Place and duration of study: Department of Gastroenterology, Hayatabad Medical Complex, Peshawar from 11th May 2018 to 11th November 2018.
Methodology: Ninety three patients with upper GI bleed were enrolled. After brief history and clinical evaluation, prompt resuscitation was done. Patient underwent a careful upper GI endoscopic evaluation after initial resuscitation. All endoscopic procedures were carried out by a single gastroenterologist of at least assistant professor level to detect gastric varices. All the information's collected were recorded
Results: The mean age was 37±12.2 years. Fifty four percent patients were male while 46% patients were female. Twenty two percent patients had gastric varices while 78% patients didn't had gastric varices.
Conclusion: The frequency of gastric varices was 22% in patients presenting with upper gastrointestinal bleed.
Key words: Gastric varices, Upper, Gastrointestinal bleed

INTRODUCTION

Upper GI bleeding is defined as bleeding from the gastrointestinal tract above the level of ligament of Treitz. It is among the most gastroenterological emergencies encountered by gastroenterologists in clinical setups.[1] With the advent of endoscopic modalities for the management of upper GI bleed, the role of emergency surgical exploration has been on decline. The role of radiological modalities in the management of upper GI bleed has been on the rise. Despite the availability of a range clinical modalities for the management, the burden of mortality as a result of bleeding from the gastrointestinal tract. The reported mortality dwindles around 10%. This high mortality has clinico-financial implications in term of high bed occupancy, expensive treatment accessories used in endoscopic and radiological interventions.[2] A knowledge of various causes of upper GI bleed in a population, stratification and identification of population at risk followed by catering the source of bleed in the primordial or primary phase could potentially address the high mortality rate.[3]

Upper GI endoscopy is a safe and minimally invasive technique that could potentially play an pivotal role in population at risk for upper GI bleed. Besides that, it could also help in better stratification of patients with upper GI bleed. Moreover a better treatment plan could be devised for such patients.[4] That's why, an emergent or urgent upper GI endoscopy is recommended for almost every patient with GI bleed keeping the clinical parameters of the patient.[5]

Gastric variceal bleed is one of the several causes of upper GI bleed with approximate prevalence of 13% to 21% in patients with upper GI bleed. Sarin classification for gastric varices describes gastric varices as isolated gastric varices (IGV1) or gastric varices elsewhere in the stomach (IGV2). Majority of bleed is attributed to IGV1. Majority of IGV1 are found in the fundus of the stomach commonly referred as fundal varcies.[6] The underlying pathophysiology for the development of fundal varices and subsequent bleeding is attributed to portal hypertension. Compared to esophageal varices, bleed from fundal varices is clinically more catastrophic because they tend to bleed even at comparatively lower portal pressure and carries a significantly higher proportion of re-bleed.[7] From treatment perspective, fundal varices are more challenging to treat due to larger covering area which makes it nearly impossible to band ligation and other routinely available treatment options. Sclerotherapy is the practiced treatment modality in our clinical setup[8,9].

The present study is designed to determine the frequency of GV among patients presenting with UGIB which will provide us the latest and updated information regarding frequency of gastric varices in patients presenting with upper gastrointestinal bleed.

Received on 14-07-2021
Accepted on 27-12-2021

MATERIALS AND METHODS

This cross sectional descriptive study was done after permission from Ethical Committee in the Department of Gastroenterology & Hepatobiliary Diseases, Hayatabad Medical Complex, Peshawar from 11th May 2018 to 11th November 2018. Patient presenting with upper GI bleed in the age range of 18 to 60 years were enrolled. Upper GI bleed was based on patient history of hematemesis or melena. A drop in hemoglobin by greater than 2gm/dl compared to previous hemoglobin level or complete blood count showing blood hemoglobin less than 11gm/dl was set as cut off for loss of blood. Patients with previous history of bleeding diathesis, patients taking medications including antiplatelets/anticoagulants or patients documented for peptic ulcer were excluded to address any bias. For were initially resuscitated with plasma expanders and when stable enough were subjected to upper GI endoscopy as per hospital protocol. A careful upper GI endoscopy was performed. Patients with endoscopic evidence of gastric varices were noted. Data was analyzed by using SPSS-22.

RESULTS

Ninety three patients who came with upper GI bleed were enrolled. Among them, fifty four (54%) patients were male while 43 (46%) patients were female. Male to female ratio was 1.16:1. Mean age of the patient was37±12.2 years. Majority of the patient, 31 (33%) patients were in age range 41-50 years, followed by age range of 31-40 years having 28 (30%) patients. Eighteen (20%) patients were in age range 51-60 years and 16(17%) patients were in age range 20-30 years as shown in table 2. 63(68%) patients had BMI ≤25Kg/m2 while 30(32%) patients had BMI >25Kg/m2. Mean BMI was 25±5.770 kg/m². Out of the total 93 patients, 20 patients (22%) were found having gastric varices (Tables 1-4).

Table 1: Frequency of genders (n=93)

Gender	No.	%
Male	50	54.0
Female	43	46.0

Table 2: Frequency of age

Age (years)	No.	%
20-30	16	17.0
31-40	28	30.0
41-50	31	33.0
51-60	18	20.0

Table 3: Frequency of body mass index

Body mass index (mg/m²)	No.	%
≤25K	63	68.0
>25	30	32.0

Table 4: Frequency of gastric varices

Gastric varices	No.	%
Yes	20	22.0
No	73	78.0

DISCUSSION

Acute gastrointestinal (GI) bleeding is among the most common gastroenterological emergencies requiring admission to health care setup. The condition isa potentially dangerous and high risk which proves to be fatal if treatment is delayed.[9,10].Upper GI bleed is defined as bleeding from gastrointestinal tract above the level of ligament of Treitz that clinically depicts as hematemesis or melena.[11] As compared to bleeding from the lower gastrointestinal tract (below the level of ligament of Treitz), UGIB is more prevalent and carries worst prognosis with overall mortality ranging from 6% to 10%.incidence of UGIB is approximately 100 cases per 100,000 population per year.[12]

Our study shows that mean age was 37±12.2 years. Fifty four percent patients were male while 46% patients were female. Twenty two percent patients had gastric varices while 78% patients didn't had gastric varices. These results are somewhat different from the study results of Bhutta et al[13] in which mean age was 52.8 years. Though majority 64.5% of patients was male but the gastric varices were present only in 2(1.4%) patients.

However study results are somewhat similar to the study conducted by Farhan et al[14] in which 13.7% patients had gastric varices in patients presenting with upper GI bleeding. Similarly the results of our study are also compatible with results of the study done by Hadayat et al[15] in Abbottabad in which Gastric varices were found in 33.3% of patients. Our study results are also showing almost the same results shown by the study done by Mumtaz et al[16] in which the prevalence of gastric varices was 15 %.

CONCLUSION

Gastric varices are present 22% in patients presenting with upper gastrointestinal bleed in our local set up.

Conflict of interest: Nil

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