Journal of Population Therapeutics & Clinical Pharmacology

RESEARCH ARTICLE
DOI: 10.53555/jptcp.v29i02.4574

ACUTE UPPER GASTROINTESTINAL BLEED: ETIOLOGICAL SPECTRUM IN A TERTIARY CARE HOSPITAL OF NORTH WEST REGION OF PAKISTAN

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Introduction

Gastrointestinal bleeding is a common GI emergency throughout the world especially in the developing countries like Pakistan[1]. It has a high incidence rate of approximately 50-150 cases per 100,000 people per year[2]. Mortality rate from GI bleed approaches up to 15%[3,4]. It is defined as upper GI bleed when the source of the bleed is proximal to the ligament of treitz and as acute when the mode of presentation is either hematemesis, hematochezia and or melena[3,5].

There are multiple causes of the acute upper GI bleed, however significant geographical variations in the spectrum of etiology exists. For example in many local studies variceal bleeding is the most common cause of acute upper GI bleed. It is followed by peptic ulcer disease[6,8]. Other less common causes included esophagitis, Mallory-Weiss tear, upper GI malignancies, erosive gastritis and duodenitis, vascular ectasias and Dieulafoy's lesions[6,7,8].

Objective of our study is to determine the local etiological spectrum of acute upper GI bleeding as no such study have been conducted in our local population.

Patients and Methods

This retrospective descriptive study is carried out in the department of Gastroenterology, Qazi Hussain Ahmed Medical Complex, Nowshera, Khyber Pakhtunkhwa from January 2018 till December 2022. All patients above 12 years of age who presented with hematemesis, hematochezia, and or melena and underwent upper GI endoscopy were included in the study. The study approval was taken from the hospital ethical committee. The sampling technique used was non-probability sampling (consecutive).

All the data like name, age, gender and other information related to medical history were recorded on a predesigned proforma. All the analysis of collected data was done by employing IBM SPSS version 24. For variables such as gender and etiology, frequency and percentages were determined.

Results

During the study period 2027 endoscopies were performed, in 302 (14.89%) cases indication was upper GI bleed (table 1). According to our data upper GI bleed was more common in males (54.64%) as compared to females (45.36%) as shown in figure 1.

In 20.86% (n=63) of the cases of upper GI bleed the endoscopy was unremarkable, whereas in 79.14% (n=239) of the cases endoscopy showed different pathologies in which peptic ulcer (27.15%) was the most common etiology of upper GI bleed followed by variceal bleed (25.5%) (table 2)

Table 1	
Total no. of endoscopies	2027
Endoscopies for Upper GI bleed	302 (14.89%)

figure 1: Gender destribution

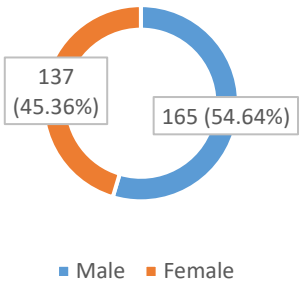

Table 2	
Endoscopic findings	No. of cases (%)
Peptic ulcer	82 (27.15%)
Duodenal ulcer	49
Gastric ulcer	28
Gastric & duodenal ulcer	5
Varices	77 (25.5%)
Normal endoscopies	63 (20.86%)
Gastritis/duodenitis	45 (14.90%)
Reflux esophagitis	12 (3.97%)
Malignancies	10 (3.31%)
CA Stomach	5
CA esophagus	4
CA duodenum	1
Camerons ulcer	3 (1%)
MW tear	3 (1%)
Duolifey lesion	2 (.66%)
Portal hypertensive gastropathy	2 (.66%)
GIST	1 (.33%)
Marginal ulcer	1(.33%)
Esophageal candidiasis	1(.33%)
TOTAL	302 (100%)

Discussion

Acute upper GI bleed is a life threatening emergency. There is a wide variation in the etiological spectrum of upper gastrointestinal bleed and these dispersed results are mainly due to geographical

and demographical differences[9]. The present study demonstrated the frequency of various etiological factors responsible for acute upper GI bleed in the local population. It was observed that UGIB has approximately similar gender distribution, with a slight male predominance, which is comparable to some other local studies (Farhan S et al., Ali SS et al.)[1,10] and an African study[7]. However study by Sher F et al. and Bhutta S et al. showed male predominance with M:F of 2-2.5:1[3,11].

In our study, approximately 21% (n=63) of the endoscopies were normal, which is slightly higher as compared to other studies which showed normal endoscopies in up to 16% of the cases[7]. Bhutta S et al. in their study showed unremarkable endoscopies up to 12 % of the cases[3]. In another study conducted by Shah et al. showed unremarkable endoscopies in 3% of the cases[12]. High number of normal endoscopies in our study was due to the fact that endoscopy in our set up was performed on specified days of the week during the study period. Delayed endoscopies can be a reason for the high number of normal endoscopies in our study.

Our data showed endoscopic pathological findings in almost 79% (n=239) of the cases. Peptic ulcer bleed was the most common etiology of upper GI bleed followed by variceal bleed. Like our study Boonpongmanee S et al. and Bhutta S et al. also showed high peptic ulcer related bleed (32 and 34% respectively)[3,13]. In United Kingdom and in a study conducted in India also showed peptic ulcer as the predominant cause of UGIB[4,2]. However, our finding is contradictory to majority of other studies conducted in large local centers and in most of the other Asian countries which showed high incidence of variceal bleed as compared to peptic ulcer bleed. Study by Ali SS et al. and Sher F et al. showed variceal bleed in approximately 72% and 58% of the cases[19,11]. Study in Africa showed variceal bleed in up to 40% of the cases[7]. Gastroduodenitis accounts for approximately 15% of the cases according to our data which is almost the same in most of the local studies[8].

CONCLUSION

Peptic ulcer-related upper GI bleed is still the most common cause of UGIB in studies conducted in peripheral centers as compared to studies performed in large local centers, where variceal bleed is the major cause of acute UGIB. This might be due to the large referral of the variceal bleed patients to these centers from the peripheries. Therefore the studies conducted in these large centers might not show the true picture.

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