

Original Research

Assessment of cases of upper gastrointestinal bleeding

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ABSTRACT:

Background: Upper gastrointestinal bleeding (UGIB) refers to bleeding that occurs in the upper part of the gastrointestinal tract, typically originating from the esophagus, stomach, or duodenum. The present study was conducted to assess cases of upper gastrointestinal bleeding. **Materials & Methods:** 76 patients with Upper gastrointestinal bleeding (UGIB) of both genders were enrolled. Parameters such as etiology, outcome of management were recorded. Laboratory findings such as hemoglobin, WBC count, platelets count, arterial oxygen saturation, respiratory rate, pulse rate, serum Creatinine, BUN etc. were recorded. **Results:** Out of 76 patients, males were 46 and females were 30. The etiology found to be oesophageal varices in 32, peptic ulcer disease in 24, gastritis in 5, GERD in 3 and gastroduodenal ulcer in 2 cases. Comorbidity was cardiac disease in 14, chronic liver disease in 7, renal insufficiency in 3, diabetes mellitus in 16 and hypertension in 21. Pre-endoscopy Rockall score was 3.1 and post-endoscopy Rockall score was 6.2. The difference was significant ($P < 0.05$). **Conclusion:** Oesophageal varices was the most common cause of UGIB, followed by peptic ulcer disease.

Keywords: chronic liver disease, diabetes mellitus, Upper gastrointestinal bleeding

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INTRODUCTION

Upper gastrointestinal bleeding (UGIB) refers to bleeding that occurs in the upper part of the gastrointestinal tract, typically originating from the esophagus, stomach, or duodenum. UGIB can result from various underlying conditions.¹ Open sores that develop in the lining of the stomach or duodenum, often due to infection with *Helicobacter pylori* bacteria or use of nonsteroidal anti-inflammatory drugs (NSAIDs). Enlarged and swollen veins in the lower esophagus, commonly seen in patients with liver cirrhosis.² Tears in the mucosal lining of the esophagus, often caused by severe vomiting or retching. Superficial erosion of the gastric or duodenal mucosa, which can occur due to various factors including NSAID use, alcohol abuse, or stress.³ Cancers of the esophagus, stomach, or duodenum can cause UGIB, although they are less common causes compared to peptic ulcers or varices. Inflammation of the esophagus, often due to gastroesophageal reflux disease (GERD) or infections such as *Candida* or herpes simplex virus.⁴

The presentation of UGIB can vary depending on the severity and location of the bleeding. Common symptoms may include vomiting blood, which may be bright red or have a coffee-ground appearance (indicating partially digested blood). Black, tarry stools resulting from the digestion of blood in the gastrointestinal tract.⁵ Passage of fresh, bright red blood through the rectum, indicating rapid transit of blood through the GI tract. Fatigue, weakness, pale skin, shortness of breath, and rapid heart rate may occur if there is significant blood loss and subsequent anemia.⁶ The present study was conducted to assess cases of upper gastrointestinal bleeding.

MATERIALS & METHODS

The present study was conducted on 76 patients with Upper gastrointestinal bleeding (UGIB) of both genders. All were informed regarding the study and their written consent was obtained.

Data such as name, age, gender etc. was recorded. Parameters such as etiology, outcome of management were recorded. Laboratory findings such as

hemoglobin, WBC count, platelets count, arterial oxygen saturation, respiratory rate, pulse rate, serum Creatinine, BUN etc. were recorded. Data thus

obtained were subjected to statistical analysis. P value < 0.05 was considered significant.

RESULTS

Table I Distribution of patients

Total- 76		
Gender	Males	Females
Number	46	30

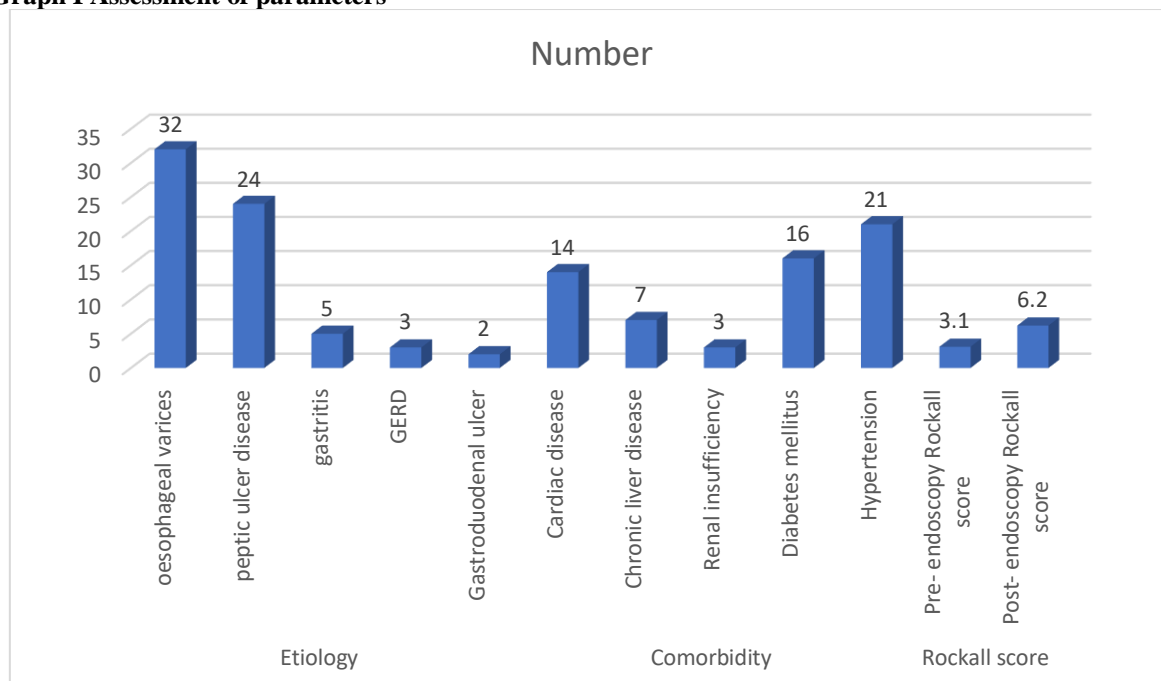
Table I shows that out of 76 patients, males were 46 and females were 30.

Table II Assessment of parameters

Parameters	Variables	Number	P value
Etiology	oesophageal varices	32	0.01
	peptic ulcer disease	24	
	gastritis	5	
	GERD	3	
	Gastroduodenal ulcer	2	
Comorbidity	Cardiac disease	14	0.92
	Chronic liver disease	7	
	Renal insufficiency	3	
	Diabetes mellitus	16	
	Hypertension	21	
Rockall score	Pre- endoscopy Rockall score	3.1	0.01
	Post- endoscopy Rockall score	6.2	

Table II shows that etiology found to be oesophageal varices in 32, peptic ulcer disease in 24, gastritis in 5, GERD in 3 and gastroduodenal ulcer in 2 cases. Comorbidity was cardiac disease in 14, chronic liver disease in 7, renal insufficiency in 3, diabetes mellitus in 16 and hypertension in 21. Pre- endoscopy Rockall score was 3.1 and post- endoscopy Rockall score was 6.2. The difference was significant ($P < 0.05$).

Graph I Assessment of parameters



DISCUSSION

The upper gastrointestinal bleeding is among the most typical gastrointestinal crises, which typically result in death 10% as the rate. Despite improvements in the identification and under UGIB control, the death rate

has remained same notably within the past 50 years.⁷ To effectively treat patients, a risk stratification method must be used to classify them into low-risk and high-risk category, which may be utilized to direct medical care and follow up.⁸ Treatment of UGIB aims

to stabilize the patient, control bleeding, and address the underlying cause.⁹ Supportive measures may include intravenous fluids, blood transfusions to correct anemia, and medications to suppress gastric acid production (e.g., proton pump inhibitors) and promote hemostasis (e.g., intravenous proton pump inhibitors, octreotide). Endoscopic interventions such as injection therapy, thermal coagulation, clipping, or band ligation may be performed to achieve hemostasis.¹⁰ In severe or refractory cases of UGIB, surgical intervention may be necessary to control bleeding or remove the source of bleeding.¹¹ The present study was conducted to assess cases of upper gastrointestinal bleeding.

We found that out of 76 patients, males were 46 and females were 30. Moledina et al¹² identified the causes of UGIB and factors that increase the risk of mortality in these patients. A total of 170 patients with UGIB were included. Males accounted for the majority (71.2%). Median age of the study population was 40.0 years. Chronic liver disease was present in 30.6% of study patients. The most common cause of UGIB among the 86 patients who underwent endoscopy was oesophageal varices (57%), followed by peptic ulcer disease (18%) and gastritis (10%). Mortality occurred in 57 patients (33.5%) and was significantly higher in patients with high white blood cell count, raised serum alanine aminotransferase, raised serum total bilirubin and lack of an endoscopic procedure done. Rebleeding was reported in 12 patients (7.1%) and readmission due to UGIB in 4 patients (2.4%).

We observed that etiology found to be oesophageal varices in 32, peptic ulcer disease in 24, gastritis in 5, GERD in 3 and gastroduodenal ulcer in 2 cases. Comorbidity was cardiac disease in 14, chronic liver disease in 7, renal insufficiency in 3, diabetes mellitus in 16 and hypertension in 21. Pre- endoscopy Rockall score was 3.1 and post- endoscopy Rockall score was 6.2. Lanis et al¹³ reported outcomes and predictive factors for bleeding continuation/re-bleeding and mortality of NVUGIB in clinical practice in different European countries. Patients were managed according to routine care, and data regarding bleeding continuation/re-bleeding, pharmacological treatment, surgery and mortality during 30-days after the initial bleed were collected. A multivariate analysis of clinical factors predictive of poor outcomes was conducted. Overall, 2660 patients (64.7% men; mean age 67.7 years) were evaluable. Significant differences across countries in bleeding continuation/re-bleeding (range: 9-15.8%) or death (2.5-8%) at 30 days were explained by clinical factors (number of comorbidities, age > 65 years, history of bleeding ulcers, in-hospital bleeding, type of lesion or type of concomitant medication). Other factors (country, size of hospital, profile of team managing the event, or endoscopic/pharmacological therapy received) did not affect these outcomes. Similar predictors were observed in patients with high-risk stigmata.

The shortcoming of the study is small sample size.

CONCLUSION

Authors found that oesophageal varices was the most common cause of UGIB, followed by peptic ulcer disease.

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