

A study of clinical profile of the patients undergoing upper GI endoscopy at tertiary health care centre

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Abstract

Background: Upper gastrointestinal bleeding (UGIB) is a common gastrointestinal (GI) emergency presenting as hematemesis and/or melena and rarely as hematochezia and is associated with significant morbidity and mortality. **Aims and Objectives:** To Study clinical profile of the patients undergoing upper GI endoscopy at tertiary health care centre. **Methodology:** This was a cross-sectional study carried at tertiary health care centre referred for Upper GI Endoscopy during one year period from January 2017 to January 2018, in the one year period there were 126 patients referred for the procedure after written and explained consent were undergone Upper GI endoscopy with all aseptic precautions and standard protocols, all the details of the patients like age, sex, complains, signs and provisional diagnosis etc. was entered to excel sheets and analyzed by Excel software for windows 10. **Result:** In our study we have seen that the average age of the patients was 11.56 ± 6.47 Yrs. and range was 1-55 Yrs. (Min –Max). The majority of the patients were Female i.e. 51.59% and Males were 48.41%. The most common complaints were Hematemesis in 22.22%, Mass per abdomen in 15.87%, Abdominal distension in 14.29%, Foreign body in 13.49%, Pain in abdomen+ Vomiting in 12.70%, Vomiting+ Fever in 9.52%. Dysphasia in 4.76%, Generalized weakness in 3.97%, Malena in 3.17%. The most common signs were Pallor + Pedal edema - 21.37%, Foreign body-15.38%, Abdominal distension -14.53%, Pallor+ Lymphadenopathy - 14.53%, Pallor + tongue coated - 12.82%, Icterus + in 11.11%, Decreased tourgor in 10.26%. The most common provisional diagnosis were Hematemesis under investigation - 22.22%, followed by Mass per abdomen - in 15.87%, Foreign body in 13.49%, Vomiting under investigation in 11.11%, Fever under investigation in 10.32%, Ascitis under investigation in 8.73%, Cirrhosis with portal Hypertension in 5.56%, Upper GI obstruction in 4.76%, Dysphagia under investigation in 4.76%, Malena under investigation in 3.17%. **Conclusion:** It can be concluded from our study that majority of the patients were in the age group of average age of the patients was 11.56 ± 6.47 Yrs. The most common complaints were Hematemesis. Mass per abdomen, Abdominal distension, Foreign body, The most common signs were, Pallor + Pedal edema, Foreign body, Abdominal distension. The most common provisional diagnosis were, Hematemesis under investigation, Mass per abdomen - in Foreign body, Vomiting under investigation, Fever under investigation, Ascitis under investigation

Key Word: Upper GI endoscopy, Upper gastrointestinal bleeding (UGIB), Hematemesis Dysphasia, Foreign body, Abdominal distension.

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Upper gastrointestinal bleeding (UGIB) is a common gastrointestinal (GI) emergency presenting as hematemesis and/or melena and rarely as hematochezia and is associated with significant morbidity and mortality.¹ The incidence of UGIB varies between 40 and 150/100,000 population and increases appreciably with age. More than 350,000 patients are hospitalized each year in the United States for UGIB² and mortality rates of 5% to 11% have been reported representing a serious and life-threatening entity.³ There are many causes for upper

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GI hemorrhage. Patients can be stratified as having either variceal or nonvariceal sources of upper GI hemorrhage as the two have different treatment algorithms and prognosis.⁴ The primary diagnostic test for evaluation of UGIB is endoscopy. Early endoscopy and endoscopic appearance of certain lesions helps to guide care and thereby reduce the costs and duration of hospitalization.⁵ Here we have done clinical Study of patients undergoing upper GI endoscopy at tertiary health care centre

METHODOLOGY

This was a cross-sectional study carried at tertiary health care centre referred for Upper GI Endoscopy during one year period from January 2017 to January 2018 , in the one year period there were 126 patients referred for the procedure after written and explained consent were undergone Upper GI endoscopy with all aseptic precautions and standard protocols , all the details of the patients like age, sex, complains , signs and provisional diagnosis etc. was entered to excel sheets and analyzed by Excel software for windows 10.

RESULTS

Table 1: Distribution of the patients as per the age

Age	Mean ± SD
Average age (Yrs.)	11.56 ±6.47
Range (Yrs.)	1-55

The average age of the patients was 11.56 ±6.47 Yrs. and range was 1-55 Yrs. (Min –Max)

Table 2: Distribution of the patients as per the sex

Sex	No.	Percentage (%)
Male	61	48.41
Female	65	51.59
Total	126	100.00

The majority of the patients were Female i.e. 51.59% and Males were 48.41%.

Table 3: Distribution of the patients as per the complains

Complains	No.	Percentage (%)
Hematemesis	28	22.22
Mass per abdomen	20	15.87
Abdominal distension	18	14.29
Foreign body	17	13.49
Pain in abdomen+ Vomiting	16	12.70
Vomiting+ Fever	12	9.52
Dysphasia	6	4.76
Generalized weakness	5	3.97
Malena	4	3.17
Total	126	100.00

The most common complaints were Hematemesis in 22.22%, Mass per abdomen in 15.87%, Abdominal distension in 14.29%, Foreign body in 13.49%, Pain in abdomen+ Vomiting in 12.70%, Vomiting+ Fever in 9.52% Dysphasia in 4.76%, Generalized weakness in 3.97%, Malena in 3.17%.

Table 4: Distribution of the patients as per the signs

Signs	No.	Percentage (%)
Pallor + Pedal edema	25	21.37
Abdominal distension	18	15.38
Foreign body	17	14.53
Pallor+ Lymphadenopathy	17	14.53
Pallor + tongue coated	15	12.82
Icterus +	13	11.11
Decreased tourgor	12	10.26
Total	117	100

The most common signs were Pallor + Pedal edema - 21.37%, Foreign body-15.38%, Abdominal distension -14.53%, Pallor+ Lymphadenopathy -14.53%, Pallor + tongue coated - 12.82%, Icterus + in 11.11%, Decreased tourgor in 10.26%.

Table 5: Distribution of the patients as per the Provisional diagnosis

Provisional diagnosis	No.	Percentage (%)
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Hematemesis under investigation	28	22.22
Mass per abdomen	20	15.87
Foreign body	17	13.49
Vomiting under investigation	14	11.11
Fever under investigation	13	10.32
Ascitis under investigation	11	8.73
Cirrhosis with portal Hypertension	7	5.56
Upper GI obstruction	6	4.76
Dysphagia under investigation	6	4.76
Malena under investigation	4	3.17
Total	126	100.00

The most common provisional diagnosis were Hematemesis under investigation-22.22%, followed by Mass per abdomen - in 15.87%, Foreign body in 13.49%, Vomiting under investigation in 11.11%, Fever under investigation in 10.32%, Ascitis under investigation in 8.73%, Cirrhosis with portal Hypertension in 5.56%, Upper GI obstruction in 4.76%, Dysphagia under investigation in 4.76%, Malena under investigation in 3.17%.

DISCUSSION

Upper gastrointestinal bleeding (UGIB) is arbitrarily defined as bleeding from a source proximal to the ligament of Treitz (which connects the fourth part of duodenum to the diaphragm near the splenic flexure of colon). While lower gastrointestinal bleed (LGIB) includes any bleed extending from ligament of Treitz to the rectum.⁶ The bleeding from GIT can present in five different ways. Hematemesis is defined as vomiting of blood, which is indicative of bleeding from the oesophagus, stomach, or duodenum. Hematemesis includes vomiting of bright red blood, which suggests recent or ongoing bleeding, and dark material (coffee ground emesis), which suggests bleeding that stopped some time ago. Melena is defined as black tarry stool and results from degradation of blood to haematin or other hemochromes by intestinal bacteria. Melena signifies bleeding that originates from UGI tract, small bowel, or proximal colonic source. Melena generally occurs when 50 to 100 mL or more of blood is delivered into the GI tract (usually the upper tract), with passage of characteristic stool occurring several hours after the bleeding event.^{7,8} Hematochezia refers to bright red blood per rectum, and suggests active UGI or small bowel bleeding, or distal colonic or anorectal bleeding. Occult gastrointestinal bleeding refers to subacute bleeding that is not clinically visible (positive faecal occult blood test (stool guaiac) or iron deficiency anemia without visible blood in the stool). Obscure gastrointestinal bleeding is bleeding from a site that is not apparent after routine endoscopic evaluation with esophagogastroduodenoscopy (upper endoscopy) and colonoscopy, and possibly small bowel radiography.⁸ The estimated annual incidence is approximately 40-150 cases per 10000 persons for upper GIB and 20-27 cases per 100000 persons for lower GIB. Mortality rate for both upper and lower GIB is estimated to be around 4% - 10%.^{9,10} Bleeding is self-limited in 80% of patients with UGI bleed, even without specific

therapy.^{11,12} Of the remaining 20% who continue to bleed or rebleed, the mortality rate is 30% to 40%.¹³ A variety of conditions can cause UGIB, and bleeding from peptic ulcer remains the commonest cause accounting for approximately (31-67%) of the cases, followed by oesophageal varices (6-39), Mallory-Weiss tears (2-8%), drugs (NSAIDs, heparin, steroid, calcium channel antagonist, coumarin derivative, aspirin+alcohol). Other causes include neoplasm, gastroduodenal erosions and arteriovenous malformations.¹⁴ In our study we have seen that the average age of the patients was 11.56 ±6.47 Yrs. and range was 1-55 Yrs. (Min -Max). The majority of the patients were Female i.e. 51.59% and Males were 48.41%. The most common complaints were Hematemesis in 22.22%, Mass per abdomen in 15.87%, Abdominal distension in 14.29%, Foreign body in 13.49%, Pain in abdomen+ Vomiting in 12.70%, Vomiting+ Fever in 9.52%. Dysphasia in 4.76%, Generalized weakness in 3.97%, Malena in 3.17%. The most common signs were Pallor + Pedal edema-21.37%, Foreign body-15.38%, Abdominal distension -14.53%, Pallor+ Lymphadenopathy - 14.53%, Pallor + tongue coated - 12.82%, Icterus + in 11.11%, Decreased turgor in 10.26%. The most common provisional diagnosis were Hematemesis under investigation-22.22%, followed by Mass per abdomen-in 15.87%, Foreign body in 13.49%, Vomiting under investigation in 11.11%, Fever under investigation in 10.32%, Ascitis under investigation in 8.73%, Cirrhosis with portal Hypertension in 5.56%, Upper GI obstruction in 4.76%, Dysphagia under investigation in 4.76%, Malena under investigation in 3.17%. Similarly Chandan Kumar¹⁵ *et al* found 150 patients were treated among which 105 were male (70%) and 45 females (30%). 111 patients (74%) had upper GI bleed, 28 patients (19%) had lower GI bleed, and 11 patients (7%) had obscure bleed. 41% of the population were diagnosed to have peptic ulcer (gastric or duodenal) as the cause behind GI bleed forming the main aetiology

in this study population, 26% had oesophageal varices constituting second important cause of GI bleed, and 7% had obscure bleed. Those who had undergone UGI endoscopy or sigmoidoscopy or colonoscopy within last one month and who were having GI bleed following GI surgery were excluded from the study.

CONCLUSION

It can be concluded from our study that majority of the patients were in the age group of average age of the patients was 11.56 ±6.47 Yrs. The most common complaints were Hematemesis, Mass per abdomen, Abdominal distension, Foreign body, The most common signs were, Pallor + Pedal edema, Foreign body, Abdominal distension The most common provisional diagnosis were, Hematemesis under investigation, Mass per abdomen-in Foreign body, Vomiting under investigation, Fever under investigation, Ascitis under investigation.

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