



COMPARATIVE EFFECT OF THE DRUGS IN UPPER GASTRO INTESTINAL BLEEDING

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ABSTRACT

Several scoring system exist to assess the risk of upper GI bleeding, out of which Glasgow Blatchford Score (GBS) seems to be precise in classifying patient's possibility of necessitating hospital based interventions or decision regarding outpatient management. Patients aged 18 and above with upper gastrointestinal bleed who were admitted in Chennai region hospitals between October 2017 and October 2018 were comprised in this prospective observational study. The clinical profile and laboratory parameters of the patients were assessed and subjected to Glasgow Blatchford scoring system and the risk analysis of the UGI bleeding was done by using the score. A total of 54 subjects with UGI bleeding were registered in the study. 74% were male. Mean age was 44.1 ± 17.84 years, mean GBS was 5.91 ± 4.27 . The mean GBS had statistically significant correlation with tachycardia, hypotension, uraemia, liver disease, malena and low Hemoglobin. However, the role of Syncope and Cardiac Failure in the scoring system was not found to be statistically significant in this study. There was an increase in number of blood transfusions as the GBS increased, which was found to be statistically significant ($p = 0.000$). Those with a GBS score of less than 6 did not require any blood transfusion. Almost all the patients with a score of zero in the study had normal endoscopic finding and they also required no blood transfusion or interventions. In emergency conditions GBS can be effortlessly used in the examination of risk patient with upper gastrointestinal bleeding.

Key words: Glasgow Blatchford Score, UGI, Hemoglobin, Blood urea nitrogen, GI bleeding, Glasgow Blatchford.

INTRODUCTION

In this segment represents introduction of this research work. Upper gastrointestinal bleeding is a shared emergency condition which account for around 85% of all Gastrointestinal bleeding.[1] Several scoring systems exist to measure the risk of upper GI bleeding, in the midst of scoring systems the Glasgow Blatchford Score appears to be precise in recognizing patient's risk of necessitating hospital based interventions or who could be managed without admission.[2] Recent publications also have identified that Glasgow Blatchford scoring is superior to the Rockall scores in forecasting the consequence of a patient with upper gastrointestinal bleeding.[3] The purpose of this study was to validate the Glasgow Blatchford scoring in the South Indian semiurban population.[4]

In these articles represents sector 2 of these articles explains the feature on the related works. In section 3 presents the materials and methods adopted and section 4 presents the particulars of the experimentations and discussions. Finally segment 5 accomplishes the articles by allocation our implications and upcoming strategies.

RELATED WORKS

In this segment represents focuses the related works of this research work. Glasgow Blatchford Scoring was first developed in 2000.[5] It was first published in the University of Glasgow, UK by Blatchford. It is one of the clinical scoring method in upper gastrointestinal bleeding.[6].

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It helps in predicting the patient who needs outpatient or hospital based management in upper gastrointestinal bleeding.[7] GBS does not require invasive procedures like endoscopy, the scoring is based on unassuming clinical and laboratory variables that are assessed once the patient offerings to the emergency department.[8] A score of 0 denotes low risk patient who are appropriate for casualty organization.[9] On the contrary a score of 6 or more were related with a greater than 50% risk of demanding an interference like blood transfusion, endoscopic conduct or surgery.[10]

Score is "0" if all the following are present:

1. Hemoglobin level > 12.9 g/dL (men) or > 11.9 g/dL (women)
2. Systolic blood pressure > 109 mm Hg
3. Pulse < 100/minute
4. Blood urea nitrogen level < 39 mg/dL
5. No melena or syncope
6. No past or present liver disease or heart failure.

Upper gastrointestinal bleeding (UGIB) is a life threatening emergency. It is a common cause of hospitalization worldwide, with early recognition and management the mortality and morbidity can be reduced.[11]

The occurrence of upper gastrointestinal bleeding in a year is around 100 cases per 1,00,000 population and it is two times superior in males than in females but the death rate is comparable in both the sexes.[12] Upper gastrointestinal bleeding is approximately four times common as lower gastrointestinal bleeding, the overall humanity rate of Upper gastrointestinal bleeding is 6- 10%.[13].

Hematocrit/hemoglobin - Compared with previous levels for identifying the ongoing blood loss and it can be falsely normal in hyperacute phase.[14] Hb is also used for assessing GBS. Lactic acid - It is a marker of tissue perfusion. Elevated lactic acid denotes augmented harshness of bleeding and amplified risk of mortality.[15] Coagulation studies - Vitamin K inhibition by Warfarin or reduced hepatic function can alter PT/INR, which can trigger GI bleeding. Thrombin time and anti-factor Xa levels helps in perceiving the occurrence of novel oral anticoagulants.

MATERIALS AND METHODS

In this segment presents the materials and strategies for this exploration work. The Goal of the Mean Arterial Pressure is more prominent than 65 and additionally the systolic circulatory strain is more noteworthy than 100 mm of Hg. Crystalloids are utilized for volume extension. Noradrenaline is utilized in determined hypotension. Focus of Hb during bonding of pressed red platelets is 8 g/dL and 9-10 g/dL in coronary or cerebrovascular infection. Intubation and sedation in

progressing hematemesis, hemodynamic insecurity and adjustment in mental status. Move the patient to ICU if the Glasgow Blatchford draining score is > 8 or GCS < 8. Vasoactive drug are not recommended. Proton siphon inhibitors are demonstrated when endoscopy, ie) 40 mg IV offer or constant imbue for 72 hours relying upon seriousness. Antifibrinolytic drug and Antimicrobial prophylaxis are not indicated. Platelets bonding if check is under 30,000/mL. Pharmacologic stomach purging with erythromycin is demonstrated. Endoscopy is shown inside 24 hrs of affirmation and prior if GBS>8. Helicobacter pylori annihilation Should be finished.

RESULTS AND DISCUSSIONS

In this segment emphasizes the results and discussions of this research work. Risk scoring systems are not usually used in emergency department for upper gastrointestinal bleeding. However, impartial criteria are needed for deciding hospitalization or discharge of the patients with upper gastrointestinal bleeding. In this regard, Glasgow and Blatchford have proposed a scoring system for upper gastrointestinal bleeding in 2000 (Glasgow-Blatchford score) which was calculated based on the clinical and laboratory variables. Males had more occurrence of upper gastrointestinal bleeding in the study group, similar study performed by Mart et al had male predominance.

1. Hematocrit/hemoglobin- Compared with previous levels for identifying the ongoing blood loss and it can be falsely normal in hyperacute phase. Hb is also used for assessing GBS.
2. Lactic acid - It is a marker of tissue perfusion. Elevated lactic acid denotes augmented harshness of bleeding and increased risk of mortality.
3. Coagulation studies - Vitamin K inhibition by Warfarin or decreased hepatic function can alter PT/INR, which can trigger GI bleeding. Thrombin time and anti-factor Xa levels helps in detecting the attendance of novel oral anticoagulants.
4. BUN/creatinine - Acute kidney injury is common in shock and is a marker for poor perfusion. Elevated BUN can be due to the presence of blood within the alimentary canal. BUN is also used in assessing GBS.
5. Liver transaminases - Elevation of transaminases is an indication of hepatic dysfunction in acute hepatitis, which may be normal or near-normal in cirrhotic patients.
6. Cardiac markers - It is another marker for tissue ischemia, elevation suggests perfusion defect.
7. BUN/creatinine - Acute kidney grievance is mutual in shock and is a marker for poor

perfusion. Elevated BUN can be due to the presence of blood within the alimentary canal. BUN is also used in assessing GBS.

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The Glasgow-Blatchford Score was compared with the clinical variables. Tachycardia (p = 0.018), Hypotension(0.030), the commonest symptom malena (p = 0.001) and the commonest comorbidity liver disease (p=0.021) in the study was found to have statistical significance and corresponded to higher GBS score.

Similar study performed by koksal et al, compared all the above and found the variables to be statistically significant. Uraemia of the subjects was compared with mean Glasgow Blatchford score and was found statistically significant (p = 0.026). In a study done by Blatchford et al, it was noted that elevated blood urea was a better marker of risk in acute UGI bleeding. The Glasgow- Blatchford score was compared with the Hb levels of men and women separately and each was evaluated as statistically significant (p = 0.000). This correlates with a study done by koksal et al, who obtained similar results. Oesophageal varices is the most common endoscopic finding noted in the study. In a study by Alema et al, disclosed that oesophageal varices is the commonest endoscopic finding in the upper gastrointestinal bleeding.

CAUSES OF ACUTE UPPER GI BLEEDING

S.No	Common	Less common	Rare
1	Gastric ulcer	Erosive Gastritis /gastropathy	Pancreatic Disease
2	Duodenal ulcer	Esophagitis	Hemobilia
3	Esophageal varices	Portal Hypertensive Gastropathy	Aortoenteric fistula
4	Malory-Weiss tear	Dieulatory lesion	Erosive Duodenitis
5		Gastric Varices	Esophageal Ulcer
6		Cameron Lesions	
7		Gastric antral vascular ectasia	
8		Neoplasms	
9		Telangiectasias	

CONCLUSION

Finally this work concludes, Glasgow Blatchford score is a simple scoring system that can be calculated only with the clinical and laboratory parameters and

thereby, under emergency conditions it can be effortlessly used in the analysis of risk in the patient with upper intestinal bleeding.

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