Use of Glasgow-Blatchford score as a screening test for endoscopy treatment in a public health from Mexico.

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INTRODUCTION

Upper gastrointestinal bleeding (UGIB) is defined as blood loss from the gastrointestinal tract above the ligament of Treitz. The majority of acute UGIB cases are secondary to non variceal causes, with peptic ulcer being the most common one. Despite advancements in management regarding pharmacological and endoscopic interventions, mortality remains up to 10%, adding increasing pressure on healthcare systems globally. For this reason, identification of a low risk patient group has a top priority. Actual guidelines suggest the use of risk stratification tolos in order to facilitate accurate triage, preserve resources and focus on patients who will benefit from endoscopic treatment. In Mexico, there is no secret that the healthcare system has been facing scarce resources since the last two decades. Little information exist regarding UGIB patients in yhis country, which is why in the emergency setting require fast and efficient decisión making, and in public health systems, risk stratification tools allow us to use our few resorurces aviable among the right group of patients.

OBJETIVE

To determine the sensitivity and specificity of the Glasgow-Blatchford Score (GBS) to predict the need of endoscopic treatment in patients with UGIB in a public health hospital from Mexico.

METHODS

We performed a retrospective, transversal analytic study.
We analyzed the clinical history of 115 patients who underwent endoscopy during the year 2023 from which 74 were due to upper GI hemorrhage, we took sex, age, Glasgow Blatchford scores, need of endoscopic treatment and re-bleeding as our main variables.
The goal was to compare the GBS in the patients who needed treatment and those who did not, in order to determine the sensitivity and specificity of the score to predict the need of endoscopic treatment

RESULTS

The mean age was 54 years, 66% were male and 34% female.

Only 28% of all patients required endoscopic treatment when endoscopy was performed. The mean GBS for the treatment group was 10.3 and 9 points to the group who did not need endoscopic intervention.

Only 8.1% of patients had a very low risk score (≤1), 91%(*n=68)* had a high-risk score (≥3) from this group only 30%(*n=21)* required endoscopic treatment, with 17% having a re-bleeding. The positive predictive value for intervention was 84% in those with a score ≥3 with a sensitivity of 31% and specificity of 42%.

We had a mortality rate of 13.5% due to UGIB complications.

Patient demographic and clinical characteristics		
Mean age	54	
BMI	26.7	
Mean hospital stay	7.4	
	n	%
Sex		
Female	25	66
Male	49	34
Alcohol consumption		
yes	42	56.8
no	32	43.2
Tobacco consumption		
yes	28	37.8
no	46	62.2
Diabetes		
yes	31	41.9
no	43	58.1
Hypertension		
yes	29	39.2
no	45	60.8
Previous UGIB episode		
yes	20	27
no	54	73
Previous endoscopy		
yes	23	31.1
no	51	68.9

Endoscopic findings and diagnosis		
	n	**%**
Normal endoscopy	1	1.4
Gastric ulcer	16	21.6
Erosive Gastropathy	22	29.7
Chronic Gastritis	3	4.1
Esophageal varices	26	35.1
Crohn´s Disease	1	1.4
Neoplasia	5	6.8

DISCUSSION

We found a very low sensitivity and specificity for the GBS as a screening test for endoscopy treatment in all the risk stratification groups. As a developing country, we can not afford to perform an endoscopy on every patient that comes to the emergency room with UGIB. Every patient in this study was treated with proton pump inhibitors before endoscopy was performed, only 30% needed any kind of endoscopic treatment even with a high risk score. As a public health hospital we need to perform more studies and develop new screening test that fit into our population that allow us to identify the correct group of patients who will beneffit from any endoscopic treatment, so we can spend our efforts on this groups and avoid wastig more of our budget on unnecessary interventions. In our experience we do not recommend the use of GBS for a screening test in order to predict the need of endoscopic treatment in patients with UGIB.

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