


BSGIE Annual Meeting 2016

GASTRO-INTESTINAL EMERGENCIES IN ENDOSCOPY
SHOULD I STAY OR SHOULD I GO ?
for Endoscopists and Endoscopy Nurses
THURSDAY 22 SEPTEMBER 2016 - KINEPOLIS IMAGIBRAINE



**Triage of patients by means of the
Glasgow-Blatchford score in upper GI
bleeding**

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The Glasgow-Blatchford score
in upper GI bleeding

1. I don't know what you are talking about
2. I know what it is but never use it
3. I use it from time to time
4. I use it on a regular basis





Case: Male 57 y/o

- Emergency Saturday afternoon:
 - Nausea, vomiting (clear and then bloody)
- PMH:
 - Arterial hypertension
 - Discal hernia surgery
- Treatment: NSAID



Physical Examination / biology



- BP: 140/90 mmHg
- HR: 85/min
- Physical exam normal
- Hb 15.7g/dl; BUN 17mg/dl; creat N, normal coagulation, plt N, liver tests N



**Call of the gastroenterologist for
gastroscopy**

What is your attitude?

- 1. The clinical story is not in favor of a severe bleeding. It can wait monday.
- 2. The patient presented with hematemesis: I need to come for a gastroscopy immediately
- 3. I need to calculate the GBS to decide






Gastroscopy

- Black blood in the stomach
- Congestion of the cardia (no visible vessel / no clot)
- Grade A esophagitis

-> non severe Mallory-Weiss syndrome

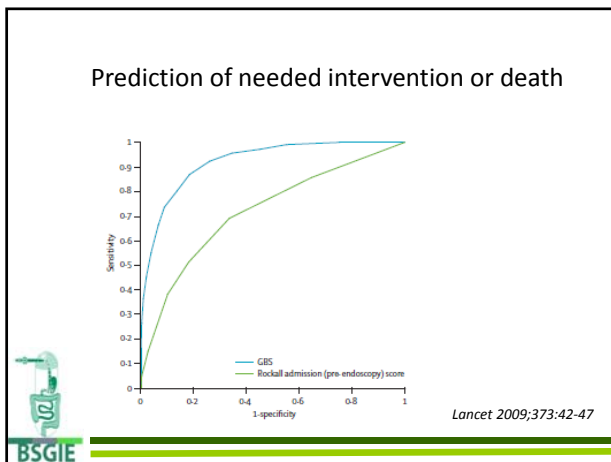
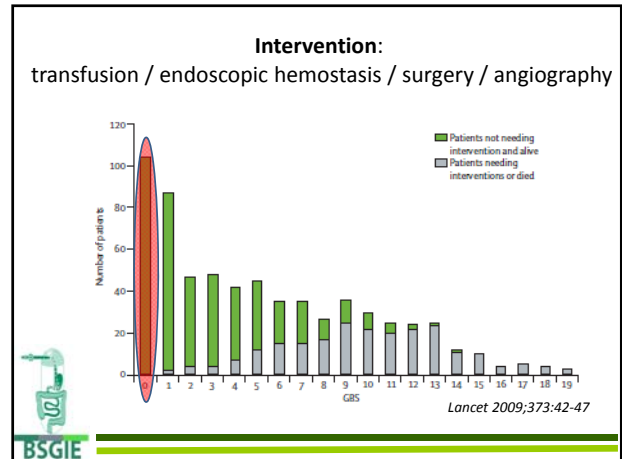
R/ PPI 40mg/d



The Glasgow-blatchford score

	assigned score
blood urea nitrogen (mg/dL)	
< 18.3	0
18.2 - 22.3	2
22.4 - 27.9	3
28 - 69.9	4
≥ 70	6
hemoglobin level for men (d/dL)	
≥ 13	0
12 - 12.9	1
10 - 11.9	3
< 10	6
hemoglobine for women (d/dL)	
≥ 12	0
10 - 11.9	1
< 10	6
systolic blood pressure (mmHg)	
≥ 110	0
100 - 109	1
90 - 99	2
< 90	3
other markers	
heart rate ≥ 100 per minute	1
melena at presentation	1
syncope at presentation	2
hepatic disease present	1
cardiac failure present	1

Blatchford O. Lancet. 2000



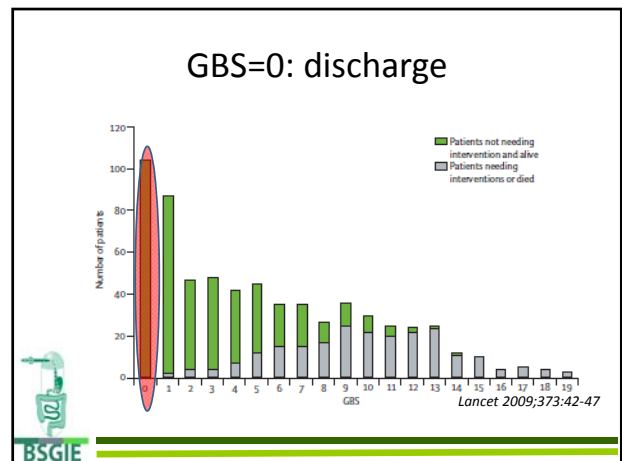
- ### Call of the gastroenterologist for gastroscopy
- What is your attitude?:
- 1. The clinical story is not in favor of a severe bleeding. It can wait monday.
 - 2. The patient presented with hematemesis: I need to come for a gastroscopy immediately
 - 3. I need to calculate the GBS to decide

Case: GBS calculation

	assigned score
blood urea nitrogen (mg/dL)	
17	0
18.2 - 22.3	2
22.4 - 27.9	3
28 - 69.9	4
≥ 70	6
hemoglobin level for men (d/dL)	
15.7	0
12 - 12.9	1
10 - 11.9	3
< 10	6
hemoglobine for women (d/dL)	
15.7	0
10 - 11.9	1
< 10	6
systolic blood pressure (mmHg)	
110	0
100 - 109	1
90 - 99	2
< 90	3
other markers	
heart rate ≥ 100 per minute	1
melena at presentation	1
syncope at presentation	2
hepatic disease present	1
cardiac failure present	1

BUN: 17mg/dl
Hb (M) :15.7g/dl
BPs>110mmHg
HR<100/min
No melena
No syncope
No liver disease
No cardiac failure

GBS= 0



GBS: literature

- 28 studies (2010-2016) on GBS validation
- 13/28: original criteria (selection/outcome)
- 5/28: studies in continental Europe (NL/Swiss)
- Validated cut-off for discharge: 0-2
- AUROC: 0.86-0.94 to predict need for intervention or death



year	first author	country	type of enrollment	total patients	mean age (years)	cut-off value	AUC	sensitivity (%)	specificity (%)	weaknesses
2000	Blatchford	Scotland	prospective	197	62.4	0	0.92	99.0	32.0	patients excluded if variceal bleeding
2007	Chen	Taiwan	retrospective	354	61.6	0	NM	99.6	25.0	patients excluded if did not undergo endoscopy or if suffered from bleeding esophageal varices
2007	Masaoka	Japan	retrospective	93	61.4	0	NM	100.0	4.3	patients excluded if did not undergo endoscopy
						2		100.0	13.0	
						3		98.6	21.7	
2011	Jansen	The Netherlands	retrospective	103	65.7	0	0.943	100.0	12.0	
						2		100.0	51.0	
2012	Cheng	USA	prospective	199	56.0	0	0.860	NM	NM	patients excluded if did not undergo endoscopy
2013	Wang	Taiwan	prospective	303	64.3	0	0.808	100.0	3.41	patients excluded if did not undergo endoscopy
2014	de Groot	The Netherlands	prospective	1001	65.0	1	0.860	99.4	13.5	patients excluded if did not undergo endoscopy
2015	Aquarius	The Netherlands	prospective	520	71	2	0.86	99.4	42	
2015	Nayer	Belgium	retrospective	257	62.9	4	0.923	100.0	32.8	

Study proposal

- Prospective multicentric validation of the GBS in Belgium
- Limited time registry period (3-6 months)
- All upper GI bleeding admitted to Emergency department
- Creation of a scientific committee (BSGIE board / members – Emergency department representatives / BESEDIM)



Glasgow-Blatchford score in upper GI bleeding

1. I won't use it in the future
2. I will use it in the future
3. I am not convinced of its usefulness
4. Before using the GBS I would like to participate in the study

