

ER-GS combined meeting

Date: 2010/06/23
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Discussion

□ LGIB

- UGIB or LGIB
- Common causes
- Algorithm
- Dx & localization
- Treatment

□ LGIB

- bleeding distal to the ligament of Treitz

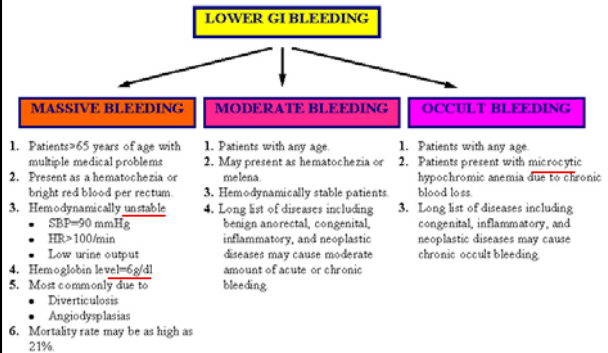
□ UGIB or LGIB

- BUN/Cr ratio

- 25
 - the younger patients
- 35
 - the older patients
- the sensitivity and the specificity
 - for all patients: 56.8% and 100%

Journal of Clinical Gastroenterology
26(2), March 1998, pp 151-152

Figure 1: Types of lower GI bleeding



Common causes of lower gastrointestinal bleeding

Anatomical
Diverticulosis
Vascular
Angiodysplasia
Ischemic
Radiation-induced telangiectasia
Inflammatory
Infectious
Idiopathic inflammatory bowel disease
Neoplastic
Polyp
Carcinoma
Others
Hemorrhoid
Ulcer
Post biopsy or polypectomy

Table

LOWER GI HEMORRHAGE IN ADULTS	PERCENTAGE OF PATIENTS
Diverticular disease	60%
-Diverticulosis/diverticulitis of small intestine	
-Diverticulosis/diverticulitis of colon	
IBD	13%
-Crohn's disease of small bowel, colon, or both	
-Ulcerative colitis	
-Noninfectious gastroenteritis and colitis	
Benign anorectal diseases	11%
-Hemorrhoids	
-Anal fissure	
-Fistula-in-ano	
Neoplasia	9%
-Malignant neoplasia of small intestine	
-Malignant neoplasia of colon, rectum, and anus	
Coagulopathy	4%
Arteriovenous malformations (AVM)	3%
TOTAL	100%

eMedicine Specialties > General Surgery > Colorectal
Lower Gastrointestinal Bleeding, Surgical Treatment

TABLE 2. Colorectal and Anal Lesions Detected by Lower GI Endoscopy in Patients Admitted With Gross LGIB

	Group A (n = 88)	Group B (n = 62)	P
Diverticulosis	57 (64.8%)	23 (37.1%)	0.001
Polyps	27 (30.7%)	17 (27.4%)	0.666
Arterio-venous malformations	6 (6.8%)	9 (14.5%)	0.122
Hemorrhoids	24 (27.3%)	22 (35.5%)	0.283
Colon cancer	9 (10.2%)	2 (3.2%)	0.124
Colonic ulcer/erosion*	8 (9.1%)	8 (12.9%)	0.456
Colitis†	3 (3.4%)	7 (11.3%)	0.093
Normal colon	4 (4.5%)	1 (1.6%)	0.405
More than one pathology	39 (44.3%)	26 (41.9%)	0.772

Group A: patients taking any antiplatelet and/or anticoagulant drugs.

Group B: patients not taking any antiplatelet or anticoagulant drugs.

J Clin Gastroenterol Volume 43, Number 1, January 2009

□ Hemorrhoid bleeding

➤ Painless bleeding

- usually associated with a bowel movement

➤ Bright red blood

- typically coats the stool at the end of defecation

➤ Blood may also drip

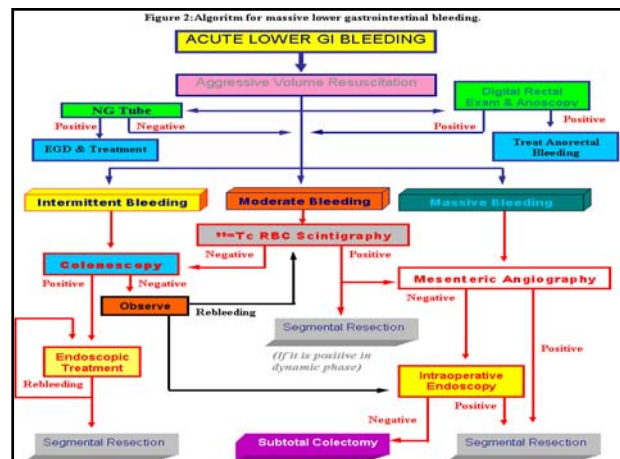
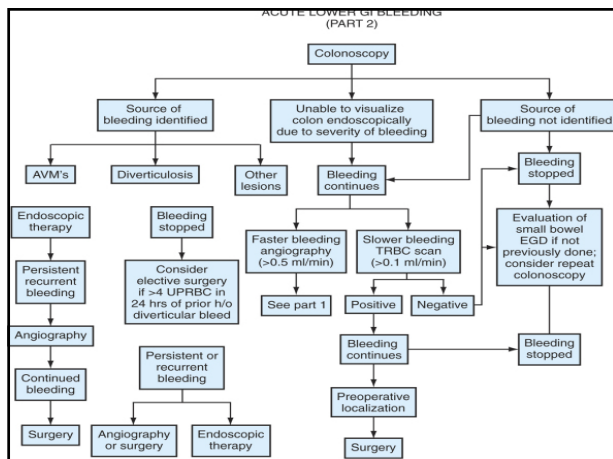
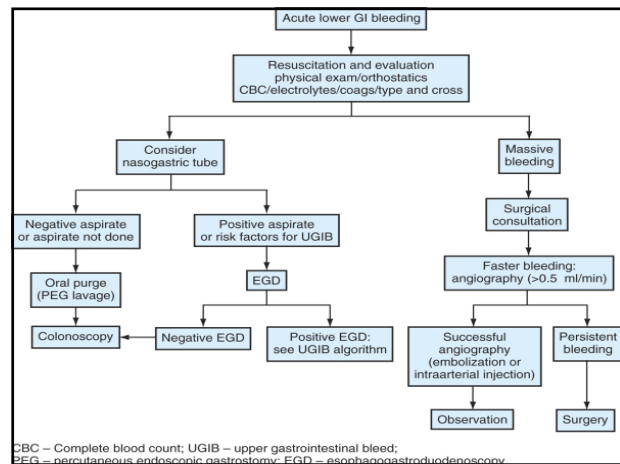
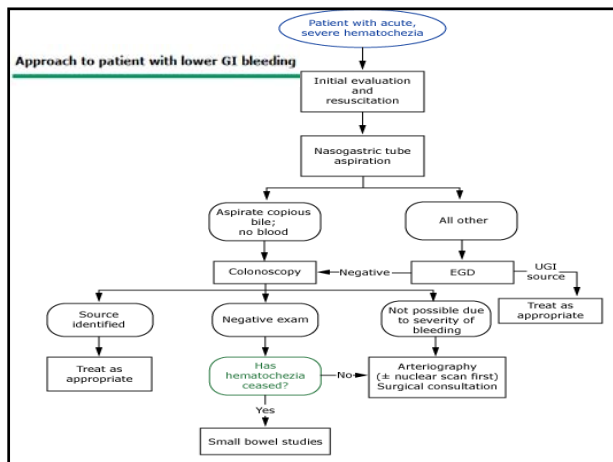
- into the toilet or stain toilet paper

➤ Occasionally

- bleeding can be copious and distressing

➤ Thus, bleeding with painful defecation

- should prompt investigation for other causes



Risk factor

□ Use of antiplatelets/anticoagulant drugs

- an independent predictor
 - of severe LGIB
 - And associated with adverse outcomes
- Colonoscopy is required
 - in patients while using such drugs

*Gross Lower Gastrointestinal Bleeding in Patients on Anticoagulant and/or Antiplatelet Therapy
J Clin Gastroenterol Volume 43, Number 1, January 2009*

ACUTE LOWER GASTROINTESTINAL BLEEDING – INITIAL ASSESSMENT PROTOCOL

Consider for discharge or non-admission with outpatient follow up if:

- age < 60 years, and;
- no evidence of haemodynamic disturbance, and;
- no evidence of gross rectal bleeding, and;
- an obvious anorectal source of bleeding on rectal examination/sigmoidoscopy.

Consider for admission if:

- age ≥ 60 years, or;
- haemodynamic disturbance, or;
- evidence of gross rectal bleeding, or;
- taking aspirin or an NSAID, or;
- significant comorbidity.

*Scottish Intercollegiate Guidelines Network
Management of acute upper and lower gastrointestinal bleeding
A national clinical guideline*

Image study

□ colonoscopy

- the initial test of choice

□ Angiography

- locate the site of bleeding and allow for therapeutic intervention
 - indicated as a primary imaging test
 - with brisk bleeding or who are hemodynamically unstable

*CLEVELAND CLINIC JOURNAL OF MEDICINE
VOLUME 74 • NUMBER 6 JUNE 2007*

□ Radionuclide scanning

- Noninvasive
- detect bleeding that is much slower
 - compared with angiography
- useful in patients
 - stable and have suspected low or intermittent rates of hemorrhage

□ Barium studies

- Contraindicated
 - in acute gastrointestinal bleeding

CT

□ The roles of CT and MRI

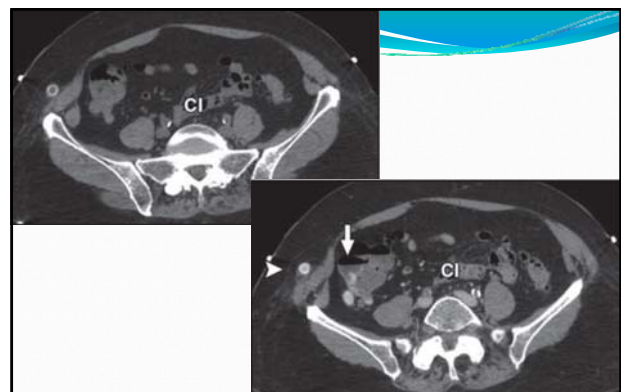
- Currently not established

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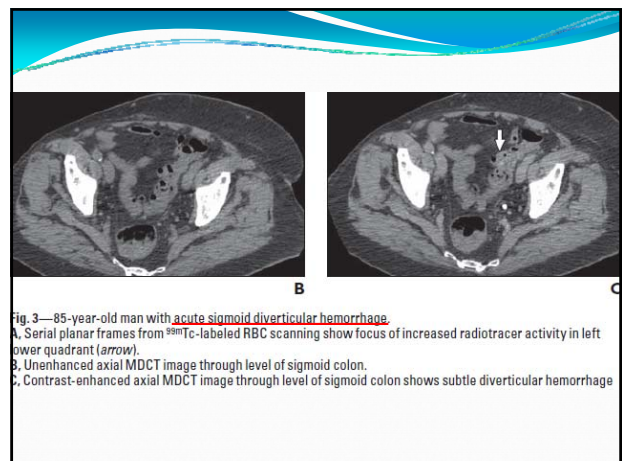
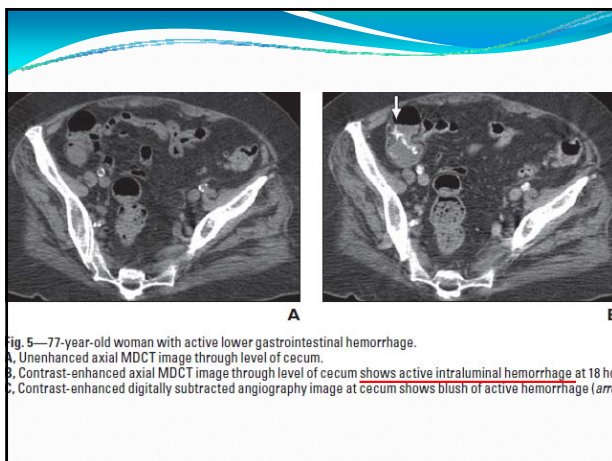
□ Contrast enhanced MDCT

- appears effective for detection and localization
 - in active LGIB
 - which hemorrhage is active at the time of CT

*Noninvasive Evaluation of Active Lower Gastrointestinal Bleeding
AJR 2008; 191:1107–1114*



84-year-old woman with acute diverticular hemorrhage
Shows bleeding diverticulum (arrow)



Surgical Options

□ SURGERY

➤ THE FINAL OPTION

- which bleeding is refractory
- or angiography is unsuccessful in providing hemostasis

➤ pinpointing the source

- by preoperative angiography or radionuclide scanning
 - provides the opportunity for a limited, strategic resection of the bowel.

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VOLUME 74 • NUMBER 6 JUNE 2007

Surgical Options

□ An emergency operation

- ultimately required in 10 to 25%

□ The usual indications

- Hemodynamic instability
- clinical deterioration
- transfusion requirements >6 units
- persistent or recurrent hemorrhage

The Management of Lower Gastrointestinal Hemorrhage
Dis Colon Rectum 2005; 48: 2010–2024

□ morbidity and mortality increase significantly

➤ when receive >10 units of blood

- therefore, most investigators have a much lower threshold for surgical intervention

□ Left-sided diverticulosis

- thought to be the source of most lower GI bleeding
- As a result, blind segmental resections of the left colon
 - considered to be the operation of choice

The Management of Lower Gastrointestinal Hemorrhage
Dis Colon Rectum 2005; 48: 2010–2024



Thanks