Obscure Gastrointestinal Bleeding: What to Do When the EGD and Colonoscopy are Normal?

Danielle Marino MD

Assistant Professor of Medicine

Division of Gastroenterology and Hepatology

Medicine of the Highest Order

University of Rochester Medical Center

Learning Objectives

Recognize that most cases of obscure GIB are due to small bowel source

List the most common causes of obscure GI bleeding

Order appropriate testing when EGD and colonoscopy are normal

Recognize possible treatment options for recurrent/obscure GI Bleeds

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Definitions

Obscure GI bleeding (OGIB)

- Bleeding of uncertain cause after negative EGD, colonoscopy and SBFT

75%

Small Bowel bleeding

- Between Ampulla of Vater and ileocecal valve
- ~5-10% of all GI bleeds

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Definitions

Negative EGD and colonoscopy = potential small bowel bleeding

Obscure GI bleeding: No source despite EGD, colonoscopy, VCE and radiographic testing

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Definitions

Overt bleeding= melena, hematemesis, hematochezia

Occult bleeding= iron deficiency anemia without melena or hematochezia

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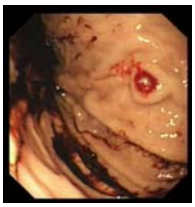
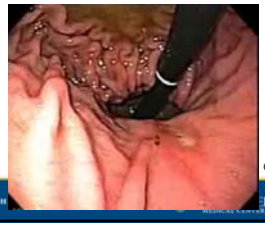
What to do when EGD and colonsocopy are negative



Second look EGD

- Recurrent hematemesis, melena or previously incomplete exam
- Consider push enteroscopy



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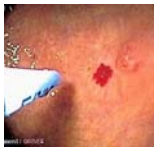
What to do when EGD and colonsocopy are negative

Second look colonoscopy

- **Recurrent hematochezia, suspect lower source or previously incomplete exam**



Video capsule endoscopy first line

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Video Capsule Endoscopy

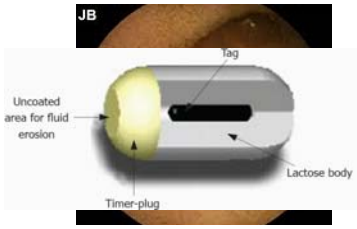
8 or 12 hour exams

2-6 frames/second

Requires bowel cleansing

Rare risk of obstruction

- **h/o bowel surgery**
- **Crohn's disease**
- **h/o radiation**



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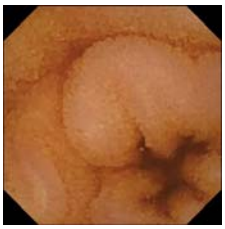

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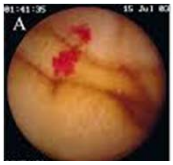
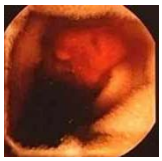
Video Capsule Endoscopy

Diagnostic yield 38-83%



Greatest yield if within 48-72hrs of overt bleed



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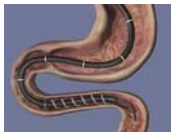
Deep Enteroscopy

Double Balloon Enteroscopy

Single Balloon Enteroscopy

Spiral Enteroscopy

Intraoperative Enteroscopy



All prolonged procedures; require anesthesia

Reserved for positive VCE

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Double Balloon Enteroscopy

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Double Balloon Enteroscopy

Diagnostic yield ~60-80%

Therapeutic succcess ~50-75%

Complication rate 1%

- Perforation
- Pancreatitis
- Ileus

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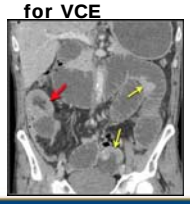
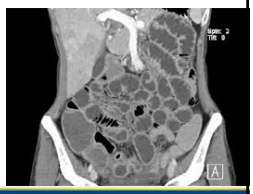
Radiographic Techniques

CT enterography should be performed if VCE negative

- Higher sensitivity for small bowel masses
  - CTE detected 9/9 small bowel tumors vs. 3/9 for VCE

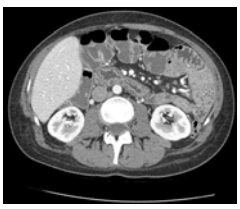


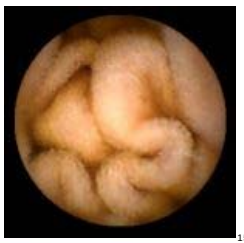


VCE and CTE are complimentary

Negative CTE→ VCE positive in 57%

Negative VCE→ CTE positive in 50%





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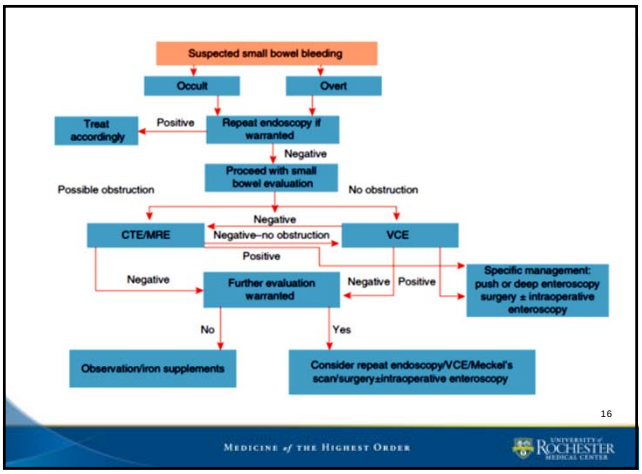
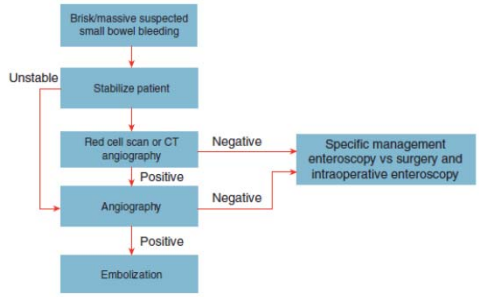


Overt Acute bleeding



When is further evaluation warranted?

- **Transfusion dependent**
- **Recurrent episodes**
- **Severe/complicated episode of bleeding**

Always weigh risk/benefits of endoscopic evaluation

Common Causes

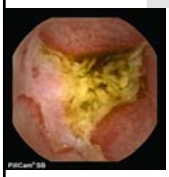
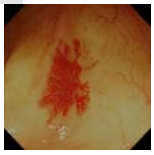


Table 2. Causes of small bowel bleeding

Common causes	
Under age 40 years	**Over age 40 years**
Inflammatory bowel disease	Angioectasia
Dieulafoy's lesions	Dieulafoy's lesions
Neoplasia	Neoplasia
Meckel's diverticulum	NSAID ulcers
Polyposis syndromes	



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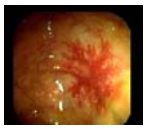
Angioectasia



Anomolous blood vessels, aka AVMs

Anywhere in GI tract

50% of patients with one angioectasia will have more than one lesion

Risk factors:

- **ESRD**
- **Aortic stenosis (Heyde's syndrome)**
- **LVAD**

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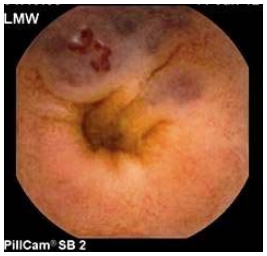
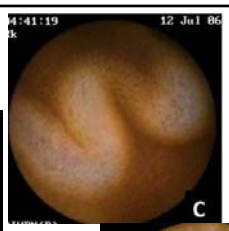
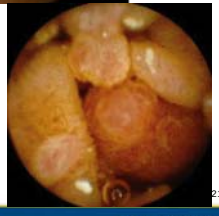
Rare Causes







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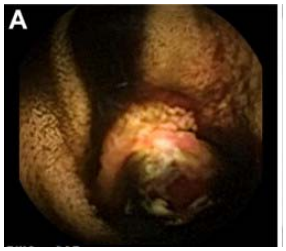
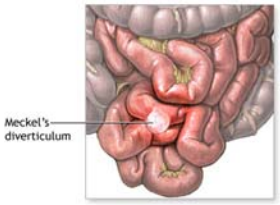
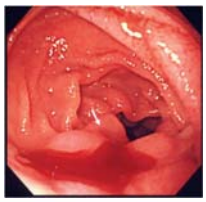
Rare Causes







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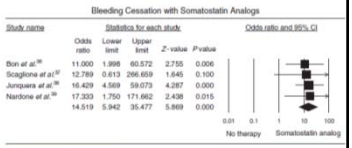
Treatment

- Source found→ endoscopic therapy
  - Rebleeding rates high for vascular lesions
- No source found
  - Iron supplementation
  - Monitor blood counts
  - ?hold anticoagulation
- Recurrent bleeding
  - Somatostatin analogues
  - Thalidomide
  - ?hold anticoagulation



Summary

- Most cases of "obscure" GI bleeds are from small bowel
- Video capsule endoscopy is the first line test when EGD and colonoscopy are unrevealing
- CT enterography is complementary to VCE
- Angioectasia is most common cause of small bowel bleeding
- Deep enteroscopy should be reserved for those with significant bleeding, persistent anemia and positive VCE
- Medical therapy with octreotide or thalidomide can be considered for recurrent bleeding

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