

Lower Gastrointestinal Bleeding											
Presentation	Hematochezia (bright red or maroon-colored blood or fresh clots per rectum), <b>painful vs non-painful is important distinction.</b>										
Pathophys	Distal to ligament of Treitz (distal duodenum)										
	<table><tr><th></th><th>Common</th><th>Uncommon</th></tr><tr><td>Infant</td><td><ul style="list-style-type: none"><li>• <b>Anal fissure</b> (often w/constipation)</li><li>• Milk protein allergy (mucus in stool, diarrhea)</li><li>• Necrotizing enterocolitis</li><li>• Swallowed maternal blood or epistaxis (can present as hematochezia 2/2 rapid transit)</li></ul></td><td><ul style="list-style-type: none"><li>• Vascular lesions</li><li>• Hirschsprung enterocolitis</li><li>• Intussusception</li><li>• Intestinal duplication</li><li>• Meckel diverticulum</li><li>• Infectious enterocolitis</li></ul></td></tr><tr><td>Older child</td><td><ul style="list-style-type: none"><li>• Anal fissure (r/o sexual abuse)</li><li>• Intussusception</li><li>• <b>Infectious enterocolitis</b> (salmonella, shigella campylobacter, E. coli 0157, Yersinia, C. diff)</li><li>• Inflammatory bowel disease (delayed puberty, wt. loss)</li><li>• <b>Meckel diverticulum</b> (large painless bleeding)</li><li>• Perianal streptococcal cellulites</li><li>• Juvenile/inflammatory polyp- painless</li></ul></td><td><ul style="list-style-type: none"><li>• Nodular lymphoid hyperplasia</li><li>• Vascular malformations</li><li>• Intestinal duplication</li><li>• Henoch-Schonlein purpura</li><li>• Infectious diarrhea (e.g., CMV colitis. amebiasis)</li><li>• Hemorrhoids</li><li>• Colonic or rectal varices</li><li>• Neutropenic enterocolitis/typhlitis (immunosuppressed)</li></ul></td></tr></table>		Common	Uncommon	Infant	<ul style="list-style-type: none"><li>• <b>Anal fissure</b> (often w/constipation)</li><li>• Milk protein allergy (mucus in stool, diarrhea)</li><li>• Necrotizing enterocolitis</li><li>• Swallowed maternal blood or epistaxis (can present as hematochezia 2/2 rapid transit)</li></ul>	<ul style="list-style-type: none"><li>• Vascular lesions</li><li>• Hirschsprung enterocolitis</li><li>• Intussusception</li><li>• Intestinal duplication</li><li>• Meckel diverticulum</li><li>• Infectious enterocolitis</li></ul>	Older child	<ul style="list-style-type: none"><li>• Anal fissure (r/o sexual abuse)</li><li>• Intussusception</li><li>• <b>Infectious enterocolitis</b> (salmonella, shigella campylobacter, E. coli 0157, Yersinia, C. diff)</li><li>• Inflammatory bowel disease (delayed puberty, wt. loss)</li><li>• <b>Meckel diverticulum</b> (large painless bleeding)</li><li>• Perianal streptococcal cellulites</li><li>• Juvenile/inflammatory polyp- painless</li></ul>	<ul style="list-style-type: none"><li>• Nodular lymphoid hyperplasia</li><li>• Vascular malformations</li><li>• Intestinal duplication</li><li>• Henoch-Schonlein purpura</li><li>• Infectious diarrhea (e.g., CMV colitis. amebiasis)</li><li>• Hemorrhoids</li><li>• Colonic or rectal varices</li><li>• Neutropenic enterocolitis/typhlitis (immunosuppressed)</li></ul>	
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Substances That Interfere with Stool Guaiac Tests	
False Positive	False Negative
<ul style="list-style-type: none"> <li>• Meat (rare or well done)</li> <li>• Ferrous sulfate (if stool pH &lt;6 )</li> <li>• Tomatoes</li> <li>• Cherries</li> <li>• NSAIDs</li> </ul>	<ul style="list-style-type: none"> <li>• Vitamin C</li> <li>• Storage of specimen &gt; 4 days</li> <li>• Outdated reagent or card</li> </ul>

Total Parenteral Nutrition (TPN)	
<b>Enteral feeding is preferred route of nutrition support:</b> ↓ gut atrophy, ↓infections (boosts gut immune function).	
<b>Indications</b>	Abnormal nutritional status or low birth weight (z-score < -2 weight for age or weight for height, < 2500g), dysfunctional GI tract or NPO > 4 days in consultation with Nutrition Service and Dietitian
<b>Access</b>	If Osm > 900, must run through central line. Calculate % of daily maintenance fluids, consider heart or renal limitations.
<b>Monitoring</b>	Weight daily, height (>24 months) periodically, length (<24 months) weekly, head circumference (<24 months) weekly, fluid balance daily, vital signs daily, Chem10 daily until stable; Chem10/hepatic function panel + TG weekly, nutritional labs if patient is on PN and minimal feeds for > 1 month checked periodically (Se, Cu, Zinc, Iron, Carnitine, CRP, vitamins A, D, E, INR, Manganese, Aluminum, Iron studies, Essential fatty acid profile)