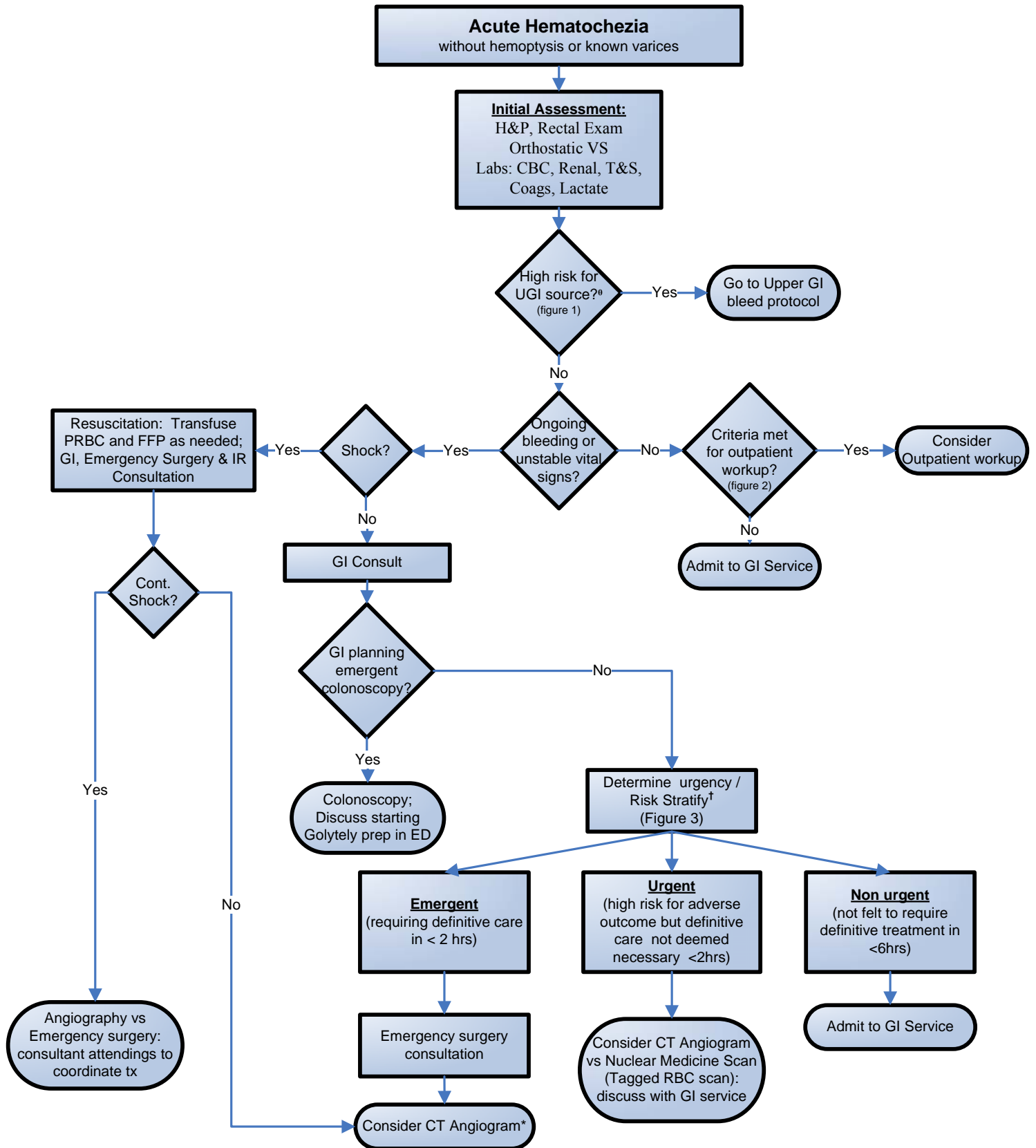


EmergencyKT: Acute Hematochezia



⁰ NG lavage inappropriate for ruling out UGIB in high risk or unstable patient due to insensitivity and potentially misleading results given high likelihood of nondiagnostic aspirate. Consider NG lavage in patient deemed low-moderate likelihood of upper source if, in discussion with GI consultant, it is determined that a positive result will result in emergent upper endoscopy. Otherwise, role of NGL is obviated. Additionally, consider NG placement to assist rapid bowel cleanse in patients deemed appropriate for emergent colonoscopy.

†Based upon overall clinical assessment of time-frame in which definitive therapy will be needed & risk factors for adverse outcome listed in figure 3.

Figure 1. Predictors of Upper GI source in patient with hematochezia without hematemesis.

<u>Strong Predictors</u>	
• Black Stool	[OR 16.6]
• Age <50	[OR 8.4]
• BUN/Creat ratio ≥ 30	[OR 10]
<u>Other Predictors</u>	
• H/O UGIB	[OR 3.7]
• HCT <30%	[OR 3.2]
• Male sex	[OR 2.2]

Witting et al. ED predictors of upper gastrointestinal tract bleeding in patients without hematemesis. Am J Emer Med. 2006;24:280-285.

Figure 2. Criteria for outpatient workup.

<u>Consider Outpatient workup if:</u>	
• Age < 60	
• No hemodynamic compromise	
• No evidence of gross rectal bleeding	
• Obvious anorectal source of rectal exam/anoscopy	

Scottish Intercollegiate Guidelines Network (SIGN). Management of acute upper and lower gastrointestinal bleeding. A national clinical guideline. Edinburgh (Scotland): Scottish Intercollegiate Guidelines Network (SIGN); 2008 Sep. 57 p.

Figure 3. Factors to consider in determining urgency of ED workup and disposition.

<u>Risk Factors for severity, rebleeding or death [Odds Ratio range in various studies]</u>	
• Abnormal Vital Signs	[OR 2.2-4.3]
• Comorbidities score $\geq 2^*$	[OR 1.9-3.0]
• Active Bleeding	[OR 2.3-3.9]
• Coagulopathy (INR >1.2)	[OR 1.9-2.3]
• Anemia [1.6-6.3]	
• Advanced Age: 50-70	[OR 3.6]
>70	[OR 4.9]
• Syncope	[OR 2.8]
• Altered mental status	[OR 3.2]
• ASA use	[OR 2.1]

*By Charlson comorbidity index (figure 3)

1. Velayos et al. Early predictors of severe lower gastrointestinal bleeding and adverse outcomes: a prospective study. Clin Gastro & Hepatol. 2004; 2: 485-490
2. Strate et al. Validation of a clinical prediction rule for severe acute lower intestinal bleeding. Am J Gastro. 2005; 100: 1821-1827
3. Kollef et al. BLEED: A classification tool to predict outcomes in patients with acute upper and lower gastrointestinal hemorrhage. Crit Care Med 1997; 25(7):1125-1132
4. Strate et al. Risk factors for mortality in lower intestinal bleeding. Clin Gastroenterol Hepatol. 2008; 6(9): 995-1004.

Figure 4. Charlson comorbidity index.

Score	Condition
1	Myocardial infarction (history, not ECG changes only) Congestive heart failure Peripheral vascular disease (includes aortic aneurysm ≥ 6 cm) Cerebrovascular disease: CVA with mild or no residua or TIA Dementia Chronic pulmonary disease Connective tissue disease Peptic ulcer disease Mild liver disease (without portal hypertension, includes chronic hepatitis) Diabetes without end-organ damage (excludes diet-controlled alone)
2	Hemiplegia Moderate or severe renal disease Diabetes with end-organ damage (retinopathy, neuropathy, nephropathy, or brittle diabetes) Tumor without metastases (exclude if >5 y from diagnosis) Leukemia (acute or chronic) Lymphoma
3	Moderate or severe liver disease
6	Metastatic solid tumor AIDS (not just HIV positive)

NOTE. For each decade > 40 years of age, a score of 1 is added to the above score.
Abbreviations: ECG, electrocardiogram; CVA, cerebrovascular accident; TIA, transient ischemic attack; AIDS, acquired immunodeficiency syndrome; HIV, human immunodeficiency virus.

Charlson et al. Validation of a combined comorbidity index. *J Clin Epidem.* 1994; 47(11): 1245-1251.