

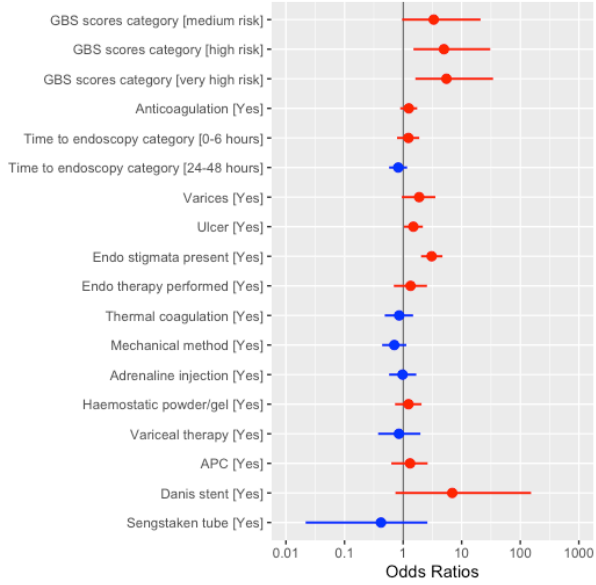
Background: Acute upper gastrointestinal bleeding (AUGIB) is a common medical emergency globally. We report endoscopic management of AUGIB in a large UK multicentre study.

Methods: A prospective audit in 152 UK hospitals from May 3 to July 2, 2022, included 5101 AUGIB cases in adults (>16 years).

Results: Of 5101 cases, 83% (4228) underwent endoscopy, median age of 69 yrs & in-patient mortality of 7.7%. Glasgow-Blatchford score (GBS) stratified patients: 4% low-risk (GBS 0-1), 21% medium-risk (2-6), 36% higher-risk (7-11), & 26% very high-risk (≥ 12). 32% were on anticoagulants at presentation. Time to endoscopy from presentation: 0-6 hrs: 6%, 6-24 hrs: 33%, & 24-48 hrs: 25%. Bleeding aetiology identified at endoscopy included peptic ulceration(30%),oesophagitis(16%),varices(10%:90% oesophageal, 16% gastric, & 2% duodenal), malignancy(4%),& other(20%). Stigmata of recent bleeding were observed in 30%(1273) cases – 41% with blood in the upper GI tract, 5% Forrest 1a, 31% 1b, 15% 2a, 21% 2b, & 16% with high-risk markings on varices. Endotherapy was applied in 27%(1135), with 54% receiving a single modality. Therapies applied included adrenaline injection (46% - with median volume of 8 mls; IQR: 5.5-10), haemostatic clips(37% - with 96% endoclips & 4% over the scope clips), variceal banding/injection therapy(25%), haemostatic powder/gel(19%), thermal coagulation(16%), argon plasma coagulation(11%), Sengstaken tube(2%), & Danis stent(1%). Endotherapy with only adrenaline injection &/or haemostatic powder/gel was applied in 16%. Among those receiving endotherapy, 4% (46/1135) did not achieve adequate haemostasis. 17%(199/1135 - 43% with blood in the upper GI tract, 7% Forrest 1a, 26% 1b, 18% 2a, 22% 2b, & 20% with high-risk markings on varices) experienced in-patient re-bleeding, leading to repeat endoscopy in 71%, interventional radiology in 14%, & surgery in 6%. Multivariable logistic regression analyses revealed predictors for in-patient rebleeding & mortality (Figure).

Conclusions: This prospective UK study identified an increased risk of rebleeding & mortality in very high-risk GBS patients & those with high-risk endoscopic stigmata. Endoscopic therapy showed a trend towards reducing mortality. Adherence to clinical guidelines on endoscopic management in AUGIB, endoscopists' skills training, & 24/7 access to therapeutic modalities are crucial to improve outcomes.

Forest Plot for in-patient Rebleeding



Forest Plot for in-patient Mortality

