

Outcome of Upper Gastrointestinal Hemorrhage According to the BLEED Risk Classification: a Two-year Prospective Survey

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Objective: Upper gastrointestinal bleeding (UGIB) is a common and serious medical emergency. The aim of this study was to predict UGIB patients' outcome according to a risk scoring system, independent of endoscopic findings, introduced by Kollef et al (BLEED: ongoing bleeding, elevated prothrombin time, erratic mental status, and unstable co-morbid disease).

Design: Prospective study.

Setting: Sina university hospital.

Method: We studied all patients who presented with UGIB during 2000 to 2002. Patients meeting the BLEED criteria at their initial assessment were classified as high-risk (71) and all others were categorized as low-risk (50). In-hospital complications were defined as recurrent UGIB, surgery to control the source of hemorrhage and hospital mortality.

Results: There were 101 patients, aged 55.7 ± 20.8 years. Re-bleeding, surgery and death occurred in 21 (20.8%), 28 (27.7%) and 14 (13.9%) of the patients, respectively. Therapeutic and diagnostic upper gastrointestinal endoscopy were performed in 7 (7%) and 83 (82.2%) of patients, respectively. Seventy percent were categorized as high-risk. There was significant difference in development of in-hospital complications, and death when considered individually, between the high and low-risk patients, but not in the rate of re-bleeding, length of hospital stay and transfused units of packed red blood cells. High-risk patients needed surgery more often than the low-risk cases but the difference was borderline significant ($p=0.051$). Low systolic blood pressure and elevated prothrombin time were independent predictors of in-hospital complications among BLEED criteria.

Conclusion: BLEED classification was capable of predicting in-hospital complications, especially mortality. It is, therefore, a helpful triage tool in centers where urgent endoscopy is hardly available.

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