Direct Discharge of Patients with Upper gastrointestinal bleeding from the Emergency Department after Endoscopy: A Feasibility Study

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Keywords:
Upper gastrointestinal bleeding
Endoscopy
reduce hospital stay

Introduction
Acute upper gastrointestinal bleeding (UGIB) is a common cause for attendance to the Emergency Department with a wide range of clinical severity, ranging from insignificant to life-threatening. While there is robust data to support the benefit of upper endoscopy within 24 hours of admission, the implementation of early upper endoscopy while patients are still in the emergency room has not been widely accepted due to lack of added benefit in terms of patient outcome such as mortality and re-bleeding rate. However, the use of upper endoscopy with the purpose of facilitating early discharge of low risk patients with upper gastrointestinal bleeding has not been studied.

Objectives
Study the feasibility of directly discharging low risk patients presenting with upper gastrointestinal bleeding from the emergency department after upper endoscopy.

Methodology
All patients attending either the Prince of Wales Hospital or Alice Ho Miu Ling Nethersole hospital with symptoms of upper gastrointestinal bleeding were resuscitated and stabilized in the Accident & Emergency Department (AED) as per local practice. Patients who did not have any of the exclusion criteria were invited by the AED doctors to enroll into the study. Recruitment was restricted to weekdays due to a lack of non-emergency endoscopy service during non-office hours. Patients who consented for the study would be sent to the endoscopy center for an upper endoscopy and then sent back to the AED. After upper endoscopy, the endoscopists recommended either for the patient to be discharged with follow up within 4 weeks or hospitalized for further management. Outcomes measured include the median waiting time to endoscopy, median hospitalization time, 30 day re-attendance rate to AED and 30 day mortality rate.
**Result**

From Oct 2015 to May 2017, a total of 112 patients were enrolled into the study with approximately 70% directly discharged from the AED. Of those directly discharged, only one patient re-attended the AED for upper gastrointestinal bleeding within 30 days and there was no patient mortality. Compared to 316 patients who attended the AED during a similar time period but were not enrolled, the median time to OGD (6 hours vs. 24 hours) and median hospitalization time (66 hours vs. 108 hours) was significantly shorter. This feasibility study showed that upper endoscopy may allow identification of low risk upper gastrointestinal bleeding patients who can be directly discharged.