Impact of time to scope on mortality in patients with variceal upper gastrointestinal bleed

Authors: Syed Anjum Ali Gardezi[A] and Usama Aslam[B]

Aims

Acute upper gastrointestinal bleed (AUGIB) is one of the most common presentations in UK hospitals and is associated with significant morbidity and mortality. Variceal bleed (oesophageal or gastric) is a common cause of AUGIB. Current guidelines recommend early endoscopic intervention (ie within 24 hours) for patients presenting with AUGIB.[1] Early endoscopy can be beneficial in achieving haemostasis more quickly and decreasing the need for transfusions.[2] However, aggressive resuscitation before rushing towards an endoscopy has its own importance as inadequate early resuscitation is believed to be a major factor in the persistently high mortality rate in patients with AUGIB.[3]

Methods

We conducted a retrospective study of 99 patients who were admitted to Cardiff and Vale University Health Board and subsequently treated in the endoscopy unit for varices related upper gastrointestinal bleed between September 2010 and September 2013. Patients were divided into three groups depending upon the time to scope from admission (within 6 hours, 6–24 hours and more than 24 hours).

Results

Our study found that very early endoscopy (ie <6 hours) compared with rapid endoscopy (6–24 hours) did not improve outcome, and in fact had a significantly worse mortality rate of 20.9% vs 9.8% (Fig 1; Table 1). Though it can be argued that patients who had a very early endoscopy were more unwell comparatively. When we compared patients in the high-risk group only, ie Glasgow Blatchford score >10, results were identical.

Conclusion

Our study reinforced the importance of access to rapid endoscopic intervention within 24 hours, but did not demonstrate the need for very early gastroscopy. This was likely due to the fact that organising very early endoscopy (within 6 hours) would slow intensive resuscitative efforts leading to worse outcome. ∎

Fig 1. Time to scope vs mortality (%).

Table 1. Time to scope vs mortality		
Time to scope	n	Mortality
<6 hours	5	1 (20%)
6–24 hours	51	5 (9.8%)
>24 hours	43	9 (20.9%)

Conflict of interest statement

None.

References

1   National Institute for Health and Care Excellence. *Acute upper gastrointestinal bleeding in over 16s: management. Clinical guideline CG141*. London: NICE, 2016.
2   Cooper GS, Chak A, Way LE *et al*. Early endoscopy in upper gastrointestinal hemorrhage: Associations with recurrent bleeding, surgery, and length of hospital stay. *Gastrointest Endosc* 1999;49:145–52.
3   Baradarian R, Ramdhaney S, Chapalamadugu R *et al*. Early intensive resuscitation of patients with upper gastro-intestinal bleeding decreases mortality. *Am J Gastroenterol* 2004;99:619–22.

Authors: [A]University Hospital of Wales, Cardiff, UK; [B]West Wales General Hospital, UK