



RESEARCH ARTICLE

A STUDY OF RISK FACTOR ASSOCIATIONS AND ETIOLOGY OF UPPER GASTROINTESTINAL BLEED

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ABSTRACT

Upper gastrointestinal bleed has varied etiology and clinical presentations ranging from single episode of melena to profound hypovolemic shock, requiring immediate fluid resuscitation and urgent upper gastrointestinal endoscopy. The prognosis depends upon the volume loss, timely fluid resuscitation, immediate upper gastrointestinal endoscopy to find out correctable cause and expertise of the gastroenterologist.

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INTRODUCTION

The bleed into the lumen of gastrointestinal tract (GIT) from proximal esophagus to duodenum (upto ligament of Treitz) is called upper gastrointestinal (UGI) bleed (Jensen, 2003). UGI bleed may manifest as hematemesis, melena, hematochezia or anemia (Laine, 2005). As hematemesis results on account of accumulation of blood in stomach, it is more severe than melena which requires only 50ml of blood for single melanic stools (Long Strength, 1995). The incidence of UGI bleed is twice as high in men than women, proportionately increasing with age. However, men present at a younger age group than women (Elghuel, 2011). It has been reported that the common etiology of UGI bleed includes peptic ulcer disease (most common), esophageal and gastric varices, erosive gastritis, Mallory-Weiss tear and angiodysplasia (Palmer KR., 2003). However, the uncommon causes of UGI bleed include gastric malignancy and polyp, duodenal and jejunal diverticuli, blood dyscrasias, vasculitis, uraemia, telangiectasia and polyarteritis nodosa (Person et al., 1989). NSAIDs intake, Helicobacter pylori colonization of stomach and duodenum and peptic ulcer disease increase the risk of UGI bleed (Bjorkman, et al., 1995).

UGI bleed accounts for about 7-8% of the emergency medical admissions. Berry and Wedon in 2006 reported a mortality rate as high as 50% in case of variceal bleed, 10% being the mortality rate attributable to other causes of UGI bleed (Berry et al., 2006). Though UGI endoscopy is gold standard for management of UGI bleed, no source of bleed is found in 5-14% of the cases (Lewis, 2000).

MATERIALS AND METHODS

The present study included 200 patients with UGI bleed admitted in Postgraduate department of Internal Medicine over a period of one year (November 2012 to October 2013) in Government Medical College, Jammu. The mean age of patients was 44.98 ± 12.46 years, 154 (77%) being male. A mean age of 41 years, Male: Female ratio of 3.6:1 and melena being reported the most common clinical presentation (Gurung et al. 2010; Kashyap et al., 2005) corroborates the observations made in our study. Alcoholism followed by NSAIDs use has been found to be the leading causes of UGI bleed (Ghanadi et al., 2013). 95 (47.5%) patients had variceal bleed on account of cirrhosis, 30 (33.33%) of them being treated by endoscopic variceal ligation and 60 (66.67%) being managed conservatively. This is in contrast to the data quoted by an author wherein about 80% of the patients were managed conservatively (Sugawa et al., 1990).

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Table 1. Risk factor and clinical associations of UGI Bleed

Mean age (years)	44.98 ± 12.46
Male : Female	3.34:1
Alcoholism	114 (57%)
NSAIDs	45 (22.50%)
Smoking	77(38.50%)
Rural: Urban	120(60%): 80(40%)
Malena: Malena+ Haemetemesis:	102 (51%): 50 (25%):
Haemetemesis	48(24%)
Esophageal varices: Gastric varices	90(45%): 5(2.50%)
Portal Hypertensive Gastropathy	30 (33.33%)
Malignancy	4.5%

The third most common (17.50%) etiology of UGI bleed as per present study was found to be erosive gastritis, duodenitis and esophagitis, as was previously described (Rao *et al.*, 1991). 4.5% of the patients who presented with UGI bleed had underlying gastric malignancy. Different studies have reported incidence of UGI attributed to underlying gastric malignancies to be 1.2 to 3.7% (Mousavi *et al.*, 2006). In our study, Gastric antral Vascular Ectasia, Gastrointestinal stromal tumors and Mallory Weiss tear were seen in 1 (0.5%), 1 (0.5%) and 2 (1%) of the patients as they are the rare causes of UGI bleed (Palmer, 2003).

Conclusion

UGI bleed needs prompt resuscitation with intravenous fluids and blood transfusion for maintaining adequate intravascular volume and *early* upper GI endoscopy to locate the culprit lesion and intervene sooner, if negotiable. Alcoholism as a leading cause of cirrhosis which decompensates into variceal bleed should be dealt with both medically and by enacting legislations.

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