Upper GI Bleed, Etiology, Role of Endoscopy in Rural Population of Punjab

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ABSTRACT

Haematemesis and malena are the two most important symptoms of upper gastrointestinal bleeding. The most common cause of upper gastrointestinal bleeding is due to a peptic ulcer. In this paper, the authors research the cause of bleeding. Contrary to previous studies, results favor esophageal varices, e.g., alcoholism or cirrhosis liver post necrotic, as the most common cause of bleeding rather than a peptic ulcer. The authors’ study is based on an observational retrospective protocol with records of 50 consecutive patients with GI bleeding, attending the emergency room from February 2007 until September 2009. Results show that the treatment of UGI bleeding has made important progress since the introduction of emergency endoscopy and endoscopic techniques for haemostasis. The application of specific protocols significantly decreases rebleeding and the need for surgery, whereas mortality is still high. The data highlight the decreasing trend of peptic ulcer as the sole cause of bleeding, as shown in previous literature, ascertaining that varices are now the most common variable.

Keywords: Band Ligation, Cirrhosis, Endoscopy, HCV, UGI Bleed, Varices

BACKGROUND

Gastrointestinal bleeding is one of the few frightening things that the patient experiences, which can indicate simple, benign, complex or malignant disorders and result in disaster if proper steps are not taken to identify the source of bleeding and treat it. Bleeding proximal to ligament of Treitz, i.e., from esophagus, stomach and duodenum is called upper gastrointestinal

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bleeding while bleeding from jejunum, ileum, colon, rectum are grouped under lower gastrointestinal bleeding. Various causes of upper GI bleed being esophageal, gastric, duodenal ulcers (40%), followed by erosions (20%), varices (10%), Mallory Weiss tear, tumors, vascular lesions and others constituting the rest. Hae-matemesis and malena are the two important symptoms of upper gastrointestinal bleeding.

Endoscopy remains the gold standard in the diagnosis and management of acute upper gastrointestinal bleeding. (Russell, 2004) Major advantage of endoscopy is that it gives direct visualization, and ability to perform therapeutic interventions. For most upper gastrointestinal lesions the sensitivity (about 90%) and specificity (about 100%) of endoscopy are far higher than those of barium radiography (about 50 and 90% respectively). Endoscopic therapy controls bleeding in greater than 90% of patients and reduces rebleeding (up to 50%), thus decreasing morbidity and improving survival. Endoscopic sclerotherapy/banding has been the most successful and safest procedure in the management of first bleed of oesophageal varices. It can stop bleeding in 80-90% of patients. (D’Amico, 1995)

With the advent of newer modalities of endoscopic treatment and latest facilities, this life threatening sequence can be arrested. So looking at all the various facts, we undertook this study to see the applicability of endoscopy in diagnosis and management of UGI bleed, with its demographic profile in our setup.

**Causes of Upper Gastrointestinal Bleeding**

Accurate estimation of true frequency with which various diseases cause bleeding is less difficult now than in previous years. Identification of the source often depends on how soon after the onset of bleeding diagnostic measures are employed. However approximately 10% of cases still remain in which no cause is demonstrated or proved despite vigorous use of various diagnostic measures currently available. Overall mortality for all sources of upper gastrointestinal bleeding is approximately 10%. (Gupta, 1993) Leonardo et al conducted a study to see for various causes of UGI bleeding, published in 2008. As per this study, endoscopic findings and stigmata of recent hemorrhage (SRH) were detected in study population (Dagradi, 1979) According to another study by Caestecker J, Endoscopic findings and the incidence rate in patients with upper Gastro Intestinal Bleeding were Duodenal ulcer - 24.3%, gastric erosion - 23.4%, gastric ulcer - 21.3%, esophageal varices - 10.3%, Mallory-Weiss tear - 7.2%, esophagitis - 6.3%, duodenitis - 5.8%, neoplasm - 2.9%, stomal (marginal) ulcer - 1.8% esophageal ulcer - 1.7% and other/miscellaneous-6.8%.

**Endoscopic Findings in Case of Bleeding**

**Varices:** In most cases, the diagnosis of varices can be made endoscopically without difficulty as they have characteristic endoscopic appearance. The veins appear irregular, serpiginous, often bluish structures running longitudinally in the sub mucosa of the esophageal wall. Dagradi classified esophageal varices as their appearance on endoscopy:

- **Grade-1** Blue red varices <2mm in diameter.
- **Grade-2** Blue varices 2-3mm in diameter.
- **Grade-3** Elevated blue veins 3-4mm in diameter.
- **Grade-4** Tortuous blue varices >4mm in diameter almost meeting in midline.
- **Grade-5** Grape like varices occluding the lumen and showing presence of small cherry-red varices overlying blue grey varices.

In some instances, a portion of the surface of veins appears red known as red color sign. It is associated with risk of hemorrhage (Ali, 2007). Overall, any red color sign increases the risk of bleeding from 12-52%.

**Ulcer:** Most patients with a bleeding upper gastrointestinal lesion undergo an endoscopic
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