

Pattern of Upper Gastrointestinal Bleeding at Rahim Yar Khan

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Design: It is a Prospective Observational case series. **Place and Duration of Study:** The study was conducted at Sheikh Zayed Hospital/Hamza Medicare Rahim Yar Khan, between January 1997 and December 2004. **Patients and Methods:** Consecutive 892 patients presenting with significant gastrointestinal bleeding, between January 1997 and December 2004 were recruited in this study. Source of active bleeding was defined by endoscopy. **Results:** Esophageal variceal bleed was the main finding 580, followed by gastric erosions 133 patients, Esophageal Ulcer 65, duodenal ulcer 61, bleeding gastric ulcer (26), Mallory Weiss Tear 21 and Osler Weber Rendu Synd/AV malformation 06 only. **Conclusion:** Esophageal varices are real problem within our area but the scope has changed in the western world. Variations in disease pattern from time to time require the periodic studies to be aware of the current underlying mechanism of the ailments in the area of work. Total reliance on literature may consume local resources.

Key words: Upper GI Hemorrhage, Esophageal Varices, Gastric Erosions.

Patients presenting with hemat-emesis and melena are common and most terrifying in emergency and accident departments throughout the country. Hemat-emesis may be either bright red blood or brown "coffee grounds" material. Melena develops after as little as 50-100ml of blood loss in the upper gastrointestinal tract. Hematochezia, though a sign of lower GI bleed, may be sign of massive upper GI bleed i.e. up to 1000ml.

UGI Endoscopy has evolved over last 35 years. It precisely views inside of esophagus, esophago-gastric junction, stomach and proximal duodenum. Flexible endoscopy is now 'Gold Standard' and surpassed all other available investigations in the detection of the source of acute upper gastrointestinal bleed. Endoscopic variceal ligation and tissue injection have resulted in significant reduction in variceal re-bleed¹.

Theoretically varices can develop anywhere in gastrointestinal tract, but distal esophagus, stomach and rectum are the common sites. At mid esophageal level varices develop within the deep sub mucosa. They progressively become more superficial at distal esophagus. They are covered only by a thin layer of supporting tissue at gastro- esophageal junction; the site most likely to rupture and bleed. Variceal bleeding is perhaps the most dreaded complication in patients with cirrhosis².

Age: Table I shows that upper Gastrointestinal bleed is least common before the age of 20 years and after 60 years. The main brunt of the disease is born by patients between 40 and 60 years. More than 60% patients belong to this age group.

Sex: Table II very eminently points out that male are more sufferer than female. 625 patients were male and 267 patients were female, with a ratio of 2.3:1

Etiology: It is observed in Table III that the main etiological factor in this study is the Hepatitis C Virus. HBs Ag Status was positive in 240 patients i.e. only 27%. Anti HCV Status was positive in 580 patients i.e. 65%. Both HBsAg and anti HCV were positive in 54 patients i.e. only 06%. While both HSsAg and anti HCV were negative

in 18 patients i.e. only 02%. Alcoholic consumption was observed in 5% patients.

Results

Esophageal bleed was the main finding; 580 patients i.e. 65.02% followed by gastric erosions 133 patients i.e. 14.91%, gastric ulcer 26 (02.91%) and duodenal ulcer 61 bleed 06.84 % each, Esophageal Ulcer 65 (07.29%) Mallory Weiss Tear 21 2.36% and Osler Weber Rendu Synd AV malformation 06 (0.67%) only.

Table I: Age distribution of patients

age in years	n=	%age
<10 years	18	2.09
11-20	18	2.09
21-30	143	16.00
31-40	125	14.00
41-50	276	30.91
51-60	276	30.91
>60	36	4.00

Table II: Sex distribution of patients.

Sex	n=	%age
male	625	70.07
female	267	29.93

Table III: Fundamental causative factor.

Agent found	n=	%age
HBsAg	240	26.90
Anti HCV	580	65.02
Both +ve	54	6.06
both -ve	18	2.02

Table IV: Etiology of upper GIT Hemorrhage (n=892)

Etiology	n=	%age
Esophageal Varices	580	65.02
Gastric Erosions	133	14.91
Esophageal Ulcer	65	7.29
Duodenal Ulcer	61	6.84
Gastric Ulcer	26	2.91
Mallory Weiss Tear	21	2.36
Weber Rendu Synd AV Malformation	6	0.67

Discussion

In our country hepatitis the forerunner of cirrhosis and variceal bleed is yet being caused by preventable causes. In a study of 224 patients suffering from Hepatitis, etiology remained unknown in 34.8%, but enormous number 32.1% and 25% were caused by intramuscular injections and surgery respectively³. Despite a reduction in newly acquired hepatitis B virus (HBV) infection since 1980s, HBV remains an important cause of liver disease in USA⁴. In a study on 47,538 individuals among the population, it was observed that anti HCV was positive in 5.31% and HBsAg was positive in 2.56%⁵. Same frequency of anti-HCV after one or multiple transfusions indicate it is necessary to screen all the donors' nation wise⁶. Cirrhosis is a state of under perfusion and is associated with decrease effective tissue perfusion⁷.

Though the mean age in fulminant live failure is 30 years⁸ Most of our patients belong to an age between 40-60 years. It correlates well with the literature⁹. 68.7 % of suffer were male¹⁰.

HCV is the most common cause of chronic liver disease in our study and it has taken over the hepatitis B in the causation of chronic liver disease in Pakistan¹¹. In another study Hepatitis C versus Hepatitis B ratio percentage is as 55.40% and 27.70% respectively¹².

Portal hypertension is an important complication of cirrhosis and manifests itself as ascites, edema, esophageal varices and rectal varices¹³. Gastric varices occur in 20% of patients¹⁴ in our cases where as in western literature peptic ulcer bleed occur in (55%)¹⁵ and it is the major cause of upper GI bleeding.

Acute variceal hemorrhage was the most common cause of significant upper GI Bleed in our study i.e. 65% is 1.80times a recent small study conducted at CMH Peshawar¹⁶. It is only 14% in western community.¹⁵ Duodenal erosions/ulcers are for less than in the western literature as 68 out of 440 accounting for 15.5%. It was significantly more in the patients with portal hypertension¹⁷.

Today surgery for peptic ulcer disease is largely restricted to the treatment of complications¹⁸. Success rate was 93.7% in 853 patients. In the negative cases Radio actively tagged red cell Scan, angiography & upper GI follow though are used¹⁹.

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