Preliminary Analysis of Upper Gastrointestinal Haemorrhage

Pages with reference to book, From 71 To 73

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Abstract

Thirty two patients of upper gastro-intestinal haemorrhage were seen in two years. Clinical evaluation, barium studies and Oesophago-gastro-duodcnoscopy were done to find the cause of bleeding.
In 50% of patients the cause was peptic ulceration while Oesophageal varices and gastric erosions were seen in 25% each with no specificity of particular age group.
Clinical examination had limited value in the diagnosis of cause of Haematemesis; 44% were diagnosed with Barium studies and 97% with endoscopy, proving that direct visualization remains the most accurate methods of diagnosis (JPMA 33:71-,i983)

Introduction

Haematemesis is a common emergency in Medical Units. Most of the patients present with acute bleeding and give no past history of gastrointestinal complaints.
The study was carried out to find the different causes of upper gastro-intestinal bleeding and also to assess the role of salicylates and other anti-inflammatory agents as a cause of bleeding due to erosions. Comparison of Barium radiology and Endoscopic examination of upper gastrointestinal tract was also done to confirm the cause of bleeding.

Material and Methods

Thirty two patients admitted through Emergency Ward of Mayo Hospital in South Medical Unit between January 1980 to January, 1982 were analysed to find out the source of acute upper gastro-intestinal bleeding. Endoscopy was carried out as an elective procedure in all cases.
After admission, history was taken with emphasis on generalized or localized abdominal pain, its relation to food. Drug intake especially of salicylates, anti-rheumatics, steroids and anticoagulants was also taken into account. Signs of stigmata of cirrhosis and history of alcohol intake was investigated and so was history of bleeding diasthesis.
Barium studies were conducted in as many as possible. Endoscopy though delayed was performed in all cases of upper gastro-intestinal bleeding.

Results

61.3% cases presented with gastro-intestinal bleeding after 4th decade of life, while 25% bled in 2nd and 3rd decade. Although the frequency of bleeding in younger age is less but almost 75% of these bled from peptic. ulceration as against older age group where peptic ulceration accounted for 50% cases only.
67% were males and 33% females the ratio of male to females was 2 1. All females were above 35 years of age indicating that peptic ulcer disease is rare in young females and should be considered only in the older group.
44% were diagnosed with Barium studies and 97% with Endoscopic examination. The cause of bleeding remained undetermined in one case by both Barium studies as well as gastro-scopy. Bleeding peptic ulcer especially a duodenal ulcer was the cause in 50% cases while Oesophageal Varices and

gastric erosions accounted for 25% each.

Discussion

In this study, 68.65% of patients were over the age of 30 and 25% between 20-30 years age, and 72% of these younger group patients had bleeding peptic ulcer. It could be thus inferred, that peptic ulcer is an important cause of bleeding at a younger age.
50% of patients had upper gastro-intestinal bleeding because of peptic ulcer and 25% each as a result of Oesophageal Varices and Gastric Erosion.

Table I

Age Group	Total No of Patie-nts	Percentage	Causes of Bleeding		
			O.V	P.U	G.E
50–60 Years	7	21.87	2	4	1
40–50 ”	9	28.13	2	4	3
30–40 ”	6	18.75	2	2	2
20–30 ”	8	25.0	1	5	2
10–20 ”	2	6.25	1	-	1
Total	32	100.00	8	15	9

Key – O.V. Oesophageal Varices
P.U. Peptic Ulcer
G.E. Gastric Erosion

Table II

Clinical Observation in 32 Patients of Haematemesis

Clinical Criteria		No. of Patients	Percent-age
Symptoms			
1.	Pain Epigastrium	13	40.6
2.	Drug intake	7	21.8
3.	Smoking	6	18.7
4.	Spicy Food	4	12.5
5.	Excessive Vomiting	2	6.25
Signs			
1.	Point tenderness	11	34.3
2.	Liver enlargement	7	21.8
3.	Spleen enlargement	6	18.7
4.	Stigmata of Liver Disease or Portal Hypertension	3	9.35
5.	Jaundice	3	9.35
6.	Ascites	3	9.35

History of anti-inflammatory analgesic drug intake was present in 19.2% of patients diagnosed as having gastric erosion. Hence these drugs were found to play: an important role in erosive disease of gastric mucosa.

Table III

Interesting Observation

Clinical Criteria	No. of Patients	Percent-age
1. Pain Epigastrium	13	40.6
2. Point Tenderness	11	34.3
3. Drug Intake	7	21.8
4. Smoking	6	18.7

Causes of upper gastrq-intcstwal bleeding in the series reported by Cotton et al. (1973) and Katz et al. (1976) are shown in Table IV.

Table IV

Causes	Bashir 1982	Cotton 1973	Katz 1976
Number of patients seen	32	208	1429
Mallory Weiss	–	1%	3%
Oesophageal Varices	25%	2%	16%
Mucosal Erosions	25%	17%	44%
Peptic Ulcer	50%	50%	25%

All these series show a high incidence of peptic ulcer as a cause of haematemesis.
Himal et al. (1974), reported that 30-40% of patients presenting with upper gastro-intestinal bleeding do so as a result of superficial erosive disease of Gastric mucosa. It has also been observed that there is usually a relationship to excessive use of Salicylates and other anti-inflammatory agents (Levy, 1974).

In this study only 36.5% of patients diagnosed as peptic ulcer had a history of Epigastric pain with point tenderness present in 34.3%. Therefore, signs and symptoms alone are insufficient in defining the source of upper gastrointestinal hemorrhage.
Only 44% of patients were diagnosed with Barium studies while 97% with Oesophago-Gastro-duodenoscopy. Barium studies were only helpful in finding a deformed doudenal cap and gave no idea about the presence of an active ulcer as an ulcer crater was not outlined in any of the films. Direct visualization of the bleeding site was only possible with the help of Endo scopic examination. All patients of Oesophageal Varices could be diagnosed on Barium studies but again it was not certain that these were actually the site of bleeding, or there was an associated lesion of a gastric ulcer.
The major diagnostic tool helpful in the diagnosis of Haematemcsis is Oesophago-Gastro-duodenoscopy which should be carried out within twenty four to forty eight hours (Mitchell and Jewel, 1977) as the diagnostic accuracy is 90% (Stevenson et aL, 1976). Barium study of the upper gastro-intestinal tract is indirect and inaccurate, missing 40% of gastric ulcers and carcinomas and is useless in identifying mucosal lesions such as gastritis and oesophagins (Stevenson et al., 1976). Even in patients of Oesophageal Varices the source of bleeding may be an ulcer or gasmtis, the incidence of which is 50% (Waidram et al., 1974). Dronfield a al. (1977) reported an incidence of 15.4% multiple potential bleeding sites. Oesophago-Gastro-Duodenoscopy can therefore be claimed to be essential for corre evaluation of upper gastro-intestinal hemorrhage as it gives a direct visualization of the bleeding site.

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