Analysis of upper gastro-intestinal bleeding
A retrospective study

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Abstract

Background:
Upper gastrointestinal hemorrhage remain a major medical problem. Despite improvement in diagnosis and the proliferation in the treatment modalities over the last few decades, an in-hospital mortality of 5% can be expected. In patient in whom the cause of the bleeding can be found, the most common causes are bleeding peptic ulcer, erosions, Mallory Weiss tear and bleeding esophageal varices.

Objective:
To evaluate patients with upper gastro intestinal (UGI) bleeding regarding age of the patients, type of presentation as well as endoscopic finding.

Methods:
This retrospective study included 204 patients admitted to endoscopic unit at Al-Sadar Teaching Hospital (Basrah) from January 2000 to December 2004. The hospital records and endoscopic reports of these patients were reviewed regarding age, sex, type of presentation, concomitant diseases and endoscopic diagnosis.

Results:
Haematemesis was the commonest mode of presentation (41.6%), followed by maelena (28.5). The most common etiological factors of UGI bleeding were duodenal ulcer (27%), gastritis (16.6%), esophageal varices (14.3%), esophagitis (7.8%) and doudenitis (5.8%).

Conclusion:

Key Words: Bleeding, upper G.I.T., analysis.

Introduction:

Upper gastrointestinal (UGI) bleeding is defined as bleeding in gastrointestinal tract that originate above the ligament of Treitz [(1)], it is a common medical condition associated with high patients morbidity, mortality as well as medical care cost [(2).] The annual rate of hospitalization as a result of UGI bleeding has been variably estimated to range in general population from 100 to 150 per 100000 persons. Although the annual incidence is low in person younger than 30 years (about 23 per 100000), it rises to 485 per 100000 in the population older than 75 years [(1).] UGI endoscope is the diagnostic modality of choice for acute UGI bleeding. Endoscope is a highly sensitive and specific both for locating and identifying bleeding lesions in the upper gastrointestinal tract. In addition, once a bleeding lesion has been identified, therapeutic Endoscope can achieve haemostatic and prevent recurrent in most patients [(3)].

Patients and Methods:

All patients admitted to Endoscope unit in the Al-Sadar Teaching Hospital with UGI bleeding in the period from January 2000 throughout December 2004 were included in this a retrospective study. The hospital records of these patients were reviewed regarding age, sex, type of presentation (haematemesis; vomiting of blood or coffee ground like material and\or maelena; black tarry stool) and concomitant diseases. In addition, the endoscopic reports were also reviewed regarding endoscopic diagnosis of the lesion based on macroscopic appearance. Endoscope was considered negative when no abnormality was seen and was repeated when the stomach is found to be filled with blood. Endoscopic sclerotheray was performed in some patients with esophageal varices using alcohol injection.

Results:

A total of 6425 UGI endoscopies have been performed in the Endoscopic unit in Al-Sadar Teaching Hospital for various indications including UGI bleeding during the study period. There were 204 patients with UGI bleeding constituting 3.18 % of total endoscopies. The mean age was 53 years (range from 8 to 85 years) with male to female ratio of 1.9:1, Table I.

Among patients with UGI bleeding, 85 (41.6%) presented with haematemesis, 58 (28.5%) with maelena and 61(29.9%) with both haematemesis and maelena, Table II. There are 12 patients were found to have liver cirrhosis (approved by liver biopsy). Endoscopic findings were illustrated in Table III; the Table shows that duodenal ulcer constitute 27% of cases followed by gastritis 16.6% and esophageal varices 14.3%. The source of the bleeding can not be identified in 10.2%.

Among patients with esophageal varices, 18 (62 %) had grade 4 lesions and 11(38%) had grade 2–3 lesions.

Discussion:

This study showed that UGI bleeding accounted for 3.18% of all endoscopies that were performed at endoscopic unit of Al-Sadar Teaching Hospital during the period of the study. This was different from the result reported from Saudi Arabia by Al-Karaw [4] and Al-Iaajam [5] who showed higher incidence 4.5% and 6% respectively.

UGI bleeding was more common in males with male to female ratio of 1.9:1 and this is in consistent with other study [6]. Haematemesis constitutes the most common way of presentations among our patients 41.6%, and this is similar to the other finding reported from Saudi Arabia by Faiza A. Qari [7] who found that around 60% of cases were presented with haematemesis. The most common finding at Endoscopy was duodenal ulcer which account for 27% of cases and this result is higher than reported by other studies (20%) [7]. . In our study esophageal varices was a third most common cause of UGI bleeding 14.3% and this is a much less than a result reported by other study in which the esophageal varices represented the majority of cases (57%) [8]. This low finding in the present study may be attributed to the fact that Hepatitis B and C and Schistosomal liver disease which are the major causes for development of esophageal varices are not prevalent in our society. Ninety five patients of the cases of UGI bleeding in children is due to esophageal varices resulting from extra hepatic obstruction of the portal vein [9]. In our study all the 4 cases of UGI bleeding below 10 years old were found to be due to esophageal varices.

No definite diagnosis of the etiology of UGI bleeding could be made in about 10% of cases. In 3 instances, it was due to warfarin overdose in patients with atrial fibrillation. The other cases may be attributed to non steroidal anti inflammatory drugs, or it may be due to angiodysplasia of the small intestine which can only be diagnosed by RBC labeled scan [10], an investigation which is unfortunately not available in our hospital.

Concomitant liver disease was reported in 12 patients who were found to have esophageal varices as a cause of their bleeding.

Table I: Age and sex distribution.

Age groups (year)	Male		Female		Total	
	No.	%	No.	%	No.	%
0 - 10	1	0.5	3	1.8	4	2.3
11 - 20	7	3.4	10	4.9	17	8.3
21 - 30	32	15.6	13	6.4	45	22
31 - 40	21	10.1	12	5.9	33	16
41 - 50	17	8.2	12	5.9	29	14.1
51 - 60	26	12.7	10	4.9	36	17.6
61 - 70	21	10.1	8	3.9	29	14
71 - 80	7	3.4	3	1.8	10	5.2
81 - 90	1	0.5	-	-	1	0.5
Total	133	64.5	71	35.5	204	100

Table II: Type of presentation.

	Heamatemesis	Maelena	Both	Total
No.	85	58	61	204
%	41.6	28.5	29.9	100

Table III. Endoscopic findings.

Findings	**No.**	**%**
Duodenal ulcers	55	27
Gastritis	34	16.6
Esophageal varices	29	14.3
Esophagitis	16	7.8
Duodinitis	12	5.8
Gastric ulcers	11	5.4
Mallory Weiss Syndrome	6	3
Carcinoma of stomach	5	2.5
Hiatus hernia	5	2.5
Gastric erosions	4	2
Fundal varices	4	2
Gastric polyps	2	2.9
Normal Endoscopy (source of bleeding not identified)	21	10.2
Total	204	100

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