



RESEARCH ARTICLE

CAUSES OF HAEMATEMESIS

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Abstract

Back ground:- Haematemesis is a common universal emergency in clinical practice and remain a major medical problem.

Objectives:- To diagnose the causes of haematemesis and the management of this problem.

Method:-One hundred Patients presented with haematemesis from July 2014 to July 2015 at AL-Yarmouk Teaching Hospital were studied and subjected to upper gastrointestinal endoscopy to elicit the causes of the bleeding.

Results:-seventy patients were male(70%) and 30 patients were females(30%) with male to female ratio of 2.3:1.The age ranged from 15 to 80 years, with mean age of the patients was 30 years,the majority being in the 5th decade of life constituting about 25patient (25%).chronic peptic ulcer are the most common cause of bleeding accounting for 40 patients(40%) followed by acute peptic erosion 30 patients(30%),hiatus hernia with reflux oesophagitis 15 patients(15%) , Gastric cancer 7 patients(7%) and oesophageal varices 5patients(5%),Mallory weiss syndrome 3 patients(3%).Ninety five patients(95%) stopped bleeding on the medical supportive measures , this took place from within few hours following admission to 2 days post-admission.In 5 patients (5%)the bleeding continue and were referred to emergency surgery, and laparotomy was done to them.The death rate in our study was 2 patients (2%) .

Conclusion:- The study showed that the most common causes of bleeding is chronic peptic ulcer followed by acute peptic erosion and 95patients(95%) were treated medically and 5 patients(5%) were treated surgically and 2 patients(2%) died.

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INTRODUCTION

The bleeding from the gastrointestinal tract is classified in to upper gastrointestinal tract bleeding(UGITB) and lower gastrointestinal tract bleeding(LGITB)¹.UGITB is bleeding above the level of ligament of Treitz, where LGITB is bleeding below the level of ligament of Treitz².Ligament of Treitz is a fibromuscular band which extends from right crus of diaphragm to duodenojejunal flexure².Patient with UGITB typically present with haematemesis³, or gradual bleeding with melena, or occult blood detected by positive test for blood in the stool⁴. Haematemesis is defined as the vomiting of blood and is a cardinal sign of UGITB and usually from a source proximal to the ligament of treitz¹.Melena is defined as the passage of black, tarry, sticky, shiny, smelly stool reflecting the presence of altered blood¹.Hematochezia is defined as the passage of bright red per rectum⁴.and may be darker⁵.Haemorrhage is a serious life threatening complication of gastrointestinal disease and it continues to present the clinician with a major challenge⁶.Flexible endoscopy has largely replaced other method of diagnosis of bleeding⁷.

PATIENTS & METHODS

This is a prospective study of 100 patients referred to the gastrointestinal endoscopic unit at Al yarmouk teaching hospital from July 2014 to July 2015. Those patients were referred from out patients clinics, and from surgical and medical units. All patients complete a questionnaire including age, sex, present and past symptoms, history of peptic ulcer disease, dyspepsia, history of cigarette smoking, alcohol consumption, steroid, aspirin and non steroidal anti inflammatory drugs ingestion, anticoagulant drugs taken, liver disease, previous haematemesis or melena, previous endoscopic examination, previous surgery. Oesophagogastroduodenoscopy was used for examination of all patients within 48 hours of bleeding. All patients were fasting 6 hours before examination. On admission all patients were treated by bed rest and stoppage of oral intake, and all patients received intravenous fluid on admission, mainly crystalloids, antibiotic & sedation. Fifteen patients (15%) were given vitamin K injection, fresh frozen plasma & blood transfusion.

RESULTS:-

seventy patients were male (70%) and 30 patients were females (30%) with male to female ratio of 2.3:1. The age ranged from 15 to 80 years, with mean age of the patients was 30 years, the majority being in the 5th decade of life constituting about 25 patients (25%). Chronic peptic ulcer are the most common cause of bleeding accounting for 40 patients (40%) followed by acute peptic erosion 30 patients (30%), hiatus hernia with reflux oesophagitis 15 patients (15%), Gastric cancer 7 patients (7%) and oesophageal varices 5 patients (5%), Mallory weis syndrome 3 patients (3%). Ninety five patients (95%) stopped bleeding on the medical supportive measures, this took place from within few hours following admission to 2 days post-admission. In 5 patients (5%) the bleeding continued and were referred to emergency surgery, and laparotomy was done to them. The death rate in our study was 2 patients (2%).

Table 1: Distribution of patients according to the age groups & sex

Age group	No. of patient	%	Female	Male
10-20	10	10	4	6
21-30	18	18	7	11
31-40	17	17	4	13
41-50	25	25	6	19
51-60	8	8	2	6
61-70	12	12	3	9
71-80	10	10	4	6
Total	100	100	30	70

Table 2: The causes of the Haematemesis

Cause of Haematemesis	No. of patients	%
Chronic peptic ulcer	40	40%
Acute peptic erosion	30	30%
Hiatus hernia with reflux oesophagitis	15	15%
Gastric cancer	7	7%
Oesophageal varices	5	5%
Mallory weis syndrom	3	3%
TOTAL	100	100%

Discussion:-

Haematemesis is a complex clinical problem that requires disciplined and sophisticated evaluation for successful management. Ower study showed that 70 patients were males (70%) and 30 patients were females (30%) and male to female ratio were 2.3:1. The age ranged from 15 to 80 years, with mean age of the patients was 30 years, the majority being in the 5th decade of life constituting about 25 patients (25%) as shown in table number one. Chronic peptic ulcer are the most common cause of bleeding accounting for 40 patients (40%) followed by acute peptic erosion 30 patients (30%), hiatus hernia with reflux oesophagitis 15 patients (15%), Gastric cancer 7 patients (7%) and oesophageal varices 5 patients (5%), Mallory weis syndrome 3 patients (3%) as shown in table number two. In Egypt the most common cause of haematemesis was bleeding from oesophageal varices⁸, that was also true for most tropical

countries⁹. But in the United Kingdom varices account for only (3%) of all causes of haematemesis¹⁰. Our study showed that endoscopic examination is feasible, safe, accurate and available method used to diagnose the causes of haematemesis, and no failure or complication was recorded in our study. Ninety five patients (95%) stopped bleeding on the medical measures, this took place from within few hours following admission to 2 days post-admission. In 5 patients (5%) the bleeding continued and were referred to surgery, and laparotomy was done to them, three patients (3%) with bleeding chronic duodenal ulcer underwent truncal vagotomy with pyloroplasty, and 2 patients (2%) with chronic gastric ulcer underwent truncal vagotomy with partial gastrectomy and gastrojejunostomy. The death rate in our study was 3 patients (3%). While in other studies the mortality rate was 7%¹¹ and 8%¹².

Conclusion

1- Haematemesis is not an uncommon clinical problem which should be treated vigorously because of the potentially high morbidity and mortality.

2- Most patients stop bleeding on medical measures and early resuscitation is important in the management of these cases.

3- The emergency surgery may be done as a temporary measure like ligation of the bleeding point or as definitive possible, like vagotomy and pyloroplasty to reduce the chance of recurrence.

4- Our study showed that the best method used for the diagnosis of the causes of bleeding is the fiberoptic oesophago-gastroduodenoscopy which is safe, available, not costly, gives accurate results and no complications resulted from its use.

RECOMMENDATIONS

1- Using endoscopic Doppler ultrasonography as effective procedure that enables objectification of endoscopic findings.¹³

2- Surgery should not be delayed if the bleeding is massive or not responding to medical measures or there is a possibility of rebleeding.

3- Other modalities which not available in our hospital may be used to stop the bleeding like:-

a- Neodymium yttrium aluminum garnet laser.¹⁴

b- Bipolar electrocoagulation.¹⁵

c- Endoscopic heat probe thermocoagulation and pure alcohol injection.¹⁶

d- Endoscopic injection sclerotherapy using a combination of 1:100000 adrenaline and 5% ethanolamine.^{17,18}

e- Endoscopic metallic clip (Olympus hemoclip).¹⁹

f- Angio embolization of the feeding vessels.²⁰

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