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Causes of hematemesis, prospective study

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Abstract
Background: Hematemesis is a common universal emergency in clinical practice and remain a major medical problem**.**
Objectives: To diagnose the causes of hematemesis and the management of this problem.
Method: One hundred Patients presented with hematemsis from July 2018 to July 2019 at AL-Yarmouk Teaching Hospital were studied and subjected to upper gastrointestinal endoscopy to elicit the causes of the bleeding.
Results: Sixty patients were male (60%) and 40 patients were females (40%) with male to female ratio of 1.5: 1. The age ranged from 10 to 80 years, with mean age of the patients was 30 $\pm$ 5 years, the majority being in the 4th decade of life constituting about 30 patient (30%). Chronic peptic ulcer are the most common cause of bleeding accounting for 45 patients (45%) followed by acute peptic erossion 25 patients (25%), hiatus hernia with reflux oesophagitis 20 patients (20%), gastric cancer 5 patients (5%) and oesophageal varices 3 patients (3%), Mallory Weis syndrome 2 patients (2%). 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 3 patients (3%).
Conclusion: The study showed that the most common causes of bleeding is chronic peptic ulcer followed by acute pepticerossion and 95 patients (95%) were treated medically and 5 patients (5%) were treated surgically and 3 patients (3%) died.

Keywords: gastric ulcer, stomach, patient

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 Treitz [2]. Ligament of Treitz is a fibromuscular band which extends from right crus of diaphragm to duodenojejunal flexure [2]. Patient with UGITB typically present with haematemesis [3]. Or gradul bleeding with melena, or occult blood detected by positive test for blood in the stool [4]. 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 treitz [1]. Melena is defined as the passage of black, tarry, sticky, shiny, smelly stool reflecting the presence of altered blood [1]. Hematochezia is defined as the passage of bright red per rectum [4]. And may be darker [5]. Haemorrhage is a serious life threatening complication of gastrointestinal disease and it continues to present the clinician with a major challenge [6]. Flexible endoscopy has largely replaced other method of diagnosis of bleeding [7].

Patient & Method
This is a prospective study of 100 patients referred to the gastrointestinal endoscpic unit at Al-Yarmouk Teaching Hospital from July 2018 to July 2019. 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 endoscopical examination, previous surgery. Oesophagogastrodoudonoscopy 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. Twenty patients (20%) were given vitamin k injection, fresh frozen plasma & blood transfusion.

Results
Sixty patients were male (60%) and 40 patients were females (40%) with male to female ratio of 1.5: 1. The age ranged from 10 to 80 years, with mean age of the patients was 30 $\pm$ 5 years, the majority being in the 4th decade of life constituting about 30 patient (30%). As showed in TABLE 1. Chronic peptic ulcer are the most common cause of bleeding accounting for 45 patients (45%) followed by acute peptic erossion 25 patients (25%), hiatus hernia with reflux oesophagitis 20 patients (20%), gastric cancer 5 patients (5%) and oesophageal varices 3 patients (3%), Mallory Weis syndrome 2 patients (2%). As showed in TABLE 2. 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 3 patients (3%).

Table 1: Distribution of patients according to the age groups.

Age group	No. of patient	%
10-20	10	10%
21-30	15	15%
31-40	30	30%
41-50	20	20%
51-60	10	10%
61-70	8	8%
71-80	7	7%
Total	100	100

Table 2: The causes of the Haematemesis

Cause of Haematemesis	No. of patients	%
Chronic peptic ulcer	45	45%
Acute peptic erossion	25	25%
Hiatus hernia with reflex oesophagitis	20	20%
Gastric cancer	5	5%
Oesophageal varieces	3	3%
Mallory weis syndrom	2	2%
TOTAL	100	100%

Discussion

Upper gastrointestinal haemorrhage remains a major medical problem with an incidence over 100/100 000 per year in western practice that increases with increasing age. Haemorrhage is strongly associated with NSAID use. Despite improvements in diagnosis and the proliferation in treatment modalities over the last few decades, an in-hospital mortality of 5–10% can be expected. This rises to 33% when bleeding is first observed in patients who are hospitalised for other reasons. In patients in whom the cause of bleeding can be found, the most common causes are peptic ulcer, erosions, Mallory–Weiss tear and bleeding oesophageal varices. Whatever the cause, the principles of management are identical. First, the patient should be adequately resuscitated and, following this, the patient should be investigated urgently to determine the cause of the bleeding. Only then should treatment of a definitive nature be instituted. For any significant gastrointestinal bleed, intravenous access should be established and, for those with severe bleeding, central venous pressure monitoring should be set up and bladder catheterization performed. Blood should be cross-matched and the patient transfused as clinically indicated, usually when >30% of blood volume has been lost. There is no evidence for the use of intravenous proton pump inhibitors prior to endoscopy. As a general rule, most gastrointestinal bleeding will stop, albeit temporarily, but there are sometimes instances when
this is not the case. In these circumstances, resuscitation, diagnosis and treatment should be carried out simultaneously. There are occasions when life-saving manoeuvres have to be undertaken without the benefit of an absolute diagnosis. For instance, in patients with known oesophageal varices and uncontrollable bleeding, a Sengstaken–Blakemore tube may be inserted before an endoscopy has been carried out. This practice is not to be encouraged, except in extremis. In some patients, bleeding is secondary to a coagulopathy. The most important current causes of this are liver disease and inadequately controlled warfarin therapy. In these circumstances the coagulopathy should be corrected, if possible, with fresh-frozen plasma or concentrated clotting factors. Upper gastrointestinal endoscopy should be carried out by an experienced operator as soon as practicable after the patient has been stabilised. In patients in whom the bleeding is relatively mild, endoscopy may be carried out on the morning after admission; this is usually guided by local policy. In all cases of severe bleeding it should be carried out immediately. A number of scoring systems have been advocated for the assessment of rebleeding and death after upper gastrointestinal hemorrhage. Perhaps the most useful of these is the Rockall score. This can be used in a pre-endoscopy format to stratify patients to safe early discharge and postendoscopy it can relatively accurately predict rebleeding and death [8].

In Egypt the most common cause of haematemesis was bleeding from oesophageal varieces [9]. That was also true for most tropical countries [10]. But in the united kingdom varices account for only (3%) of all causes of hematemesis [11]. Table 3 showed the causes of bleeding in other study [8].

Our study showed that endoscopic examination is feasible, safe, accurate and available method used to diagnose the causes of hematemesis, and no failure or complication was recorded in our study. Ninty 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 continue 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 gastrojuojenostomy. The death rate in our study was 3 patients (3%). While in other studies the mortality rate was 7 % [12]. And 8% [13].

Table 3: The causes of the Haematemesis [8].

Cause of Haematemesis	% of patients
peptic ulcer	60%
peptic erossion	26%
Oesophageal varieces	4%
Mallory weis syndrom	4%
Tumour	0.5%
Dieulafoys diseaes	0.5%
Others	5%
Total	100%

Conclusion

1. Hematemesis 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 vagatomy 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- gastroduodenoscop which is safe, available, not costy, gives accurate results and no complications resulted from its use.

Recommendation

1. Using endoscopic Doppler ultrasonography as effective procedure that enables objectification of endoscopic findings [14].

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

References

1. Greenberger NJ, Surgical treatment of digestive disease, second edition, Arnold, United Kingdom, 1990, pp. 19.
2. Sriram Bhatm M, SRB S. Manual of surgery, 4th edition, Jaypee brothers medical publisher LTD, 2013, pp. 1061.
3. Daniel TD, Dana KA, Timothy RB, Schwartz. principles of surgery, eight edition, MC Grawhill, Newyork, 2005, pp. 959-984.
4. Richard TS, ACS surgery. Principles and practice, United States of America, Web MD inc, 2003, pp. 280-287.
5. Sue Clark. Bailey, Love's. Short practice of surgery, 26th edition, CRC press, Taylor &Francis Group, 2013, pp. 1216.
6. Korman MG. Upper gastrointestinal hemorrhage, medical education (international) Ltd, 1982, pp. 597.
7. Alfred Cuscheri, Robert JC. Abdool Rahem Mossa. Essential surgical practice,volium 1, fourth edition, Arnold, London, 2002, pp. 364.
8. Bailey, Love's. Short practice of surgery, chapter 63, stomach and duodenum, 27th edition, CRC press, Taylor& Francis Group, 2018, pp. 1126-1127.
9. Hussein KE, Riffat MA. Emergency treatment of bleeding oesophageal varieces. Proc. Natl, symp. Bilharziasis. 1964; 11:297-311.
10. Look GC. Tropical gastroenterology. Oxford University press, 1980, pp. 52.
11. Schiller KFI, Truelove SC, Williams D. Haematemesis and melena with special reference to factor influencing the outcome. Br. Med. j. 1970; 7:14.
12. Razak HS, Hughes DS, Ward K. The Arab Journal of Medicine, original paper, upper gastrointestinal haemorrhage in AL Baha Saudi Arabia, endoscopical survey of 142 cases, 1985, pp. 15-17.
13. Walls WD, Glaville JN, Chadle GN. Early investigation of haematemesis and melena, Lancet. 1971; 2:387-390.
14. Kohler B, Riemman JF. The endoscopic Doppler; its value in evaluating gastrodoudenal ulcers after haemorrhage and as instrumentof control of endoscopic injection therapy, scand J Gastroenterol. 1991; (25):471-476.