
UNUSUAL CAUSES OF UPPER GASTRO-INTESTINAL BLEEDING

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Summary

Three patients with upper gastro intestinal (UGI) bleeding have been admitted to Baghdad Teaching Hospital over the period from 1999-2002. The first patient was a 35-year old female with recurrent UGI bleeding; the investigations and operative findings proved that the cause of bleeding was due to false aneurysm of the splenic artery communicating with the pancreatic ducts. The second patient was a 70-year old male, the cause of the attacks of bleeding was due to malignant endocrinal tumor of the head of pancreas eroding the duodenum. The third patient was a 65-year old female with gastric perforation and bleeding due to tuberculosis of stomach as shown by histopathology results.

Introduction

Upper gastro intestinal (UGI) bleeding is a common medical condition that results in a high patient morbidity and medical care costs. In a study from one large health maintenance organization, the annual incidence of hospitalization for acute UGI bleeding was 102 per 100000, the incidence was twice as common in males as in females and increased with age¹. UGI bleeding can be classified into several broad categories based upon anatomic and pathophysiologic factors. A prospective series of 1000 cases of severe UGI

bleeding at the UCLA and West Los Angeles Administration Medical Centers found the following distribution of casuses²; peptic ulcer disease 55%, esophageal varices 14%, arterio-venous malformation 6%, Mallory-Weiss tears 5%, tumors and erosions 4%, Dieulafoy's lesion 1% and other causes 11%.

In this study, three patients with unusual UGI bleeding admitted to our surgical unit in Baghdad Teaching Hospital are presented, including clinical picture, methods of diagnosis and management.

First Case

A 35-year-old married woman with repeated attacks of upper abdominal pain associated with melaena, fatigability and

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progressive pallor for the last two years. In the last two months, she had two severe attacks of bleeding which needed hospital admission and blood transfusion. Her Hb dropped to 6.3 gm/dl during her previous admission, upper and lower GI endoscopy were normal. For the last month, the patient starts to feel a tender, pulsating epigastric swelling.

The patient gave history of blunt abdominal trauma due to car accident few years back. On abdominal examination, there was a 7×7cm rounded, pulsating, tender epigastric mass with a bruit at the left hypochondrium

Abdominal ultrasound showed a large aneurysmal mass in the left hypochondrium. Its lumen measured 3 cm and its wall measured 3.2cm including intraluminal thrombus, along the course of splenic artery. Abdominal CT with I.V. and oral contrast revealed well defined, rounded cystic mass anteriorly located in the epigastric region with its base closely related to the body and head of pancreas. It measured (6.7 × 6.8 × 7 cm), the rest of pancreatic tissue showed uniform texture. After correction of her hemoglobin, laparotomy was done and it showed a pulsating mass behind the lesser omentum, well capsulated and attached to the body of pancreas. Following careful dissection, separation of the capsule of the mass was achieved; the mass isolated on a narrow pedicle which was ligated and the splenic artery explored (it showed no interruption of its stream). A tube drain was left and the abdomen closed. The patient had smooth recovery and no further bleeding happened to her. So the cause of the upper G.I. bleeding was due to connection of the false aneurysm with one of pancreatic ducts (haemosuccus pancreaticus)³.

Second Case

A 70-year-old man had recurrent attacks of melaena with pallor and

generalized weakness. Upper gastro-intestinal endoscopy done for him previously by other physicians showed superficial gastric erosions, but he continued to have these attacks in spite of the treatment. So he was admitted to our surgical unit, upper G.I. endoscopy showed a fungating mass protruding into the lumen of the second part of duodenum. Barium meal was also done showed a polypoid mass arising from the head of pancreas invading the second part of duodenum. After correction of his general condition, whipple's operation was done for him with resection of the tumour. Histopathology showed a malignant tumor of endocrinal origin arising from the head of pancreas⁴. Postoperatively the patient did not develop any further bleeding during one year of follow up.

Third Case

A 65-year-old woman was admitted with severe generalized abdominal pain associated with haematemesis. The patient was asthmatic on steroid therapy. On examination, the patient was dyspnoeic and hypotensive with bilateral wheezes over the chest.

Abdominal examination showed incisional hernia due to previous caesarian section with generalized tenderness and absent bowel sounds.

Chest x-ray showed air under the right diaphragm. The preoperative diagnosis was perforated peptic ulcer. After careful resuscitation, abdominal exploration showed a large perforated gastric ulcer with bleeding from the edges on the posterior upper third of stomach. Excision of the ulcer with primary repair over omental patch was performed with cleaning of the peritoneal cavity, leaving a tube drain and closure of the abdominal wall.

Histopathological examination showed a granulomatous lesion with Langhan's giant cells due to tuberculosis of stomach⁵.

Discussion

One of the obscure causes of upper G.I. bleeding is hemosuccus pancreaticus, as in our first patient, who gave a history of blunt injury to the abdomen due to car accident which was probably responsible for the development of false aneurysm of one of the pancreatic branches of the splenic artery which communicate with the pancreatic ducts causing the recurrent attacks of upper G.I. bleeding^{3,6,7}.

In the second patient, the cause of upper G.I. bleeding was due to a malignant tumor of the head of pancreas invading the medial wall of the second part of duodenum causing a polypoid growth into its lumen which was responsible for the frequent attacks of bleeding.

Neoplasms of the upper G.I. tract account for less than 3% of all cases of severe upper G.I. bleeding⁸. Patients with severe bleeding secondary to malignant upper G.I. tumors have a dismal prognosis, the majority of them die within 12 months. Surgical resection for cure or palliation is the treatment of choice. Endoscopic procedures to arrest the bleeding, including injection therapy,

theraml contact probes and laser therapy are often temporary measures prior to staging and surgical resection. Control of active bleeding is usually successful, but re-bleeding is common from non-healing malignant ulceration⁸.

In the third case, the preoperative provisional diagnosis was a bleeding peptic ulcer associated with perforation which goes with the clinical state of the patient who was an old woman, smoker and on steroid therapy.

Diagnosis of tuberculosis of the stomach is very difficult as it is often unsuspected or unrecognized, although the risk factors in the patient for tuberculosis were present⁵.

Unusual cases of upper G.I. bleeding are so variable and often unsuspected or not recognized at the time of presentation. Recent development in the diagnosis and management improved the outcome of such patients. Of these methods one endoscopic ultrasonography^{9,10} and doppler ultrasound which confirms ablation of bleeding vessel¹¹. A combined endoscopic and laparoscopic approach has also been described to localize the lesion precisely with intraoperative endoscopy, followed by a limited laparoscopic surgical resection¹².

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