Giant gastric ulcer penetrating the pancreas in a haemodynamically unstable patient

Christos Bartsokas 1,2, Sotirios Voulgaris,3 Nikolaos Economopoulos,4 Panteleimon Vassiliu3

14th Surgical Department, Panepistemiako Geniko Nosokomeio Attikon, Athens, Greece
24th Department of Surgery, General University Hospital Attikon, Athens, Greece
34th Department of Surgery, Agrinio General Hospital, Agrinio, Greece
4Second Department of Radiology, National & Kapodistrian University of Athens, School of Medicine, University General Hospital ‘Attikon’, Athens, Greece

DESCRIPTION

A man in his mid-50s presented to the emergency department of a peripheral hospital due to an episode of haematemesis, without melena, and mild abdominal discomfort. He denied fever, chills and chest pain. His medical history included lower back pain, for which Non-steroid anti-inflammatory drugs (NSAIDs) had been prescribed to him the previous 2 weeks. He denied tobacco, alcohol or drug use.

His physical examination revealed a normal temperature of 36.3°C, respiratory rate of 24/min, blood pressure of 100/65 mm Hg and heart rate of 110 beats per minute (bpm). His abdomen was soft, non-tender and without palpable masses.

His blood results revealed significant blood loss, his haemoglobin was 65 g/dL with normal basic metabolic panel and coagulation panel. We started aggressive resuscitation, placing two large bore peripheral venous lines, with 3 units of packed red blood cells (PRBCs), fresh frozen plasma (FFP) and platelets in a ratio of 1:1:1. Nasogastric and urinary tubes were also placed, and he was admitted to the internal medicine department for urgent oesophagastroduodenoscopy. Endoscopy revealed a large ulcerative lesion in the posterior gastric wall, which was actively bleeding. Epinephrine injection and clipping were performed, and haemostasis was achieved. The next day, the patient had an episode of massive haematemesis and became haemodynamically unstable. His systolic blood pressure dropped to 55 mm Hg, his heart rate was 140 bpm and his mental status was altered. New blood tests showed haemoglobin of 3.3 g/dL and marked lactate elevation. Furthermore, a nasogastric tube drained 1.2 L of fresh red blood. Immediate gastroenterology and surgical consultations were conducted, and it was decided for the patient to be transferred to the operating room, since he was not fit for endoscopy.

An exploratory laparotomy was performed with a midline incision. A longitudinal gastroduodenotomy was implemented and an actively bleeding ulcerative lesion was found in the posterior gastric wall. Overswing and ligation of gastroduodenal artery were conducted with no success. Further deterioration of the patient followed. We decided to perform distal gastrectomy. Due to firm adhesion of the stomach to proximal pancreas and the patient’s haemodynamic instability, additional pancreatic tissue was removed by complete pancreatic transection, which followed complete kocherisation. Gastrojejunostomy restored gastrointestinal continuity. A drain was placed to drain distal pancreas.

The patient recovered remarkably fast, tolerating alimentation with a daily output of 500 mL pancreatic fluid. He had no abdominal collection on ultrasound series, and he was discharged on the 7th postoperative day only with per os antibiotic treatment and subcutaneous low molecular weight heparin injections. He was reassessed after a month with decreasing rate of the pancreatic fistula to 300 mL/day (figure 1). Histology showed dysplasia but no malignancy. Three months after the operation, the fistula’s output was only 20 mL and the tube was removed. The patient recovered completely and remained clinically unrestrained.

Gastric ulcer penetrating to pancreas is a rare yet known entity,1 and as in the most of complicated peptic ulcer disease cases, conservative treatment including endoscopy can be successful.2

Figure 1 CT of the abdomen 1 month postoperatively showing transected pancreatic neck.

Figure 2 CT of the abdomen 9 months postoperatively for reassessment.
In addition, complete pancreatic neck transection is a rare condition, more frequently faced in trauma. Drainage and feeding jejunostomy is a known alternative mainly in children due to a higher morbidity of synchronous distal pancreatectomy. Our patient was monitored meticulously, and he was informed about the possibility of further operation, but fortunately that was not deemed necessary (figure 2).

Learning points

► Non-operative management (NOM) of upper gastrointestinal bleed is successful in most of the cases (endoscopy included) but haemodynamic instability or failure of NOM is the most common cause of operative management.
► Complicated gastric ulcer is of high suspicion for malignancy, and resection may be necessary.
► Pancreatic injuries are of high morbidity and mortality, thus, patient selection for conservative surgical treatment is crucial.

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Case reports provide a valuable learning resource for the scientific community and can indicate areas of interest for future research. They should not be used in isolation to guide treatment choices or public health policy.

ORCID iD Christos Bartsokas http://orcid.org/0000-0001-7199-2877

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