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Case Report

Gastrointestinal bleeding following removal of a feeding jejunostomy tube in a gastrectomised patient: an uncommon cause of acute upper GI bleeding

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Introduction

Haematemesis and haematochezia following removal of a feeding jejunostomy tube in a gastrectomised patient is an uncommon cause of acute gastrointestinal bleeding.

Case report

A 32 year old male underwent emergency total gastrectomy and Roux en Y reconstruction for oesophageal rupture at the gastro-oesophageal junction following failed balloon dilatation of a corrosive stricture. Patient had an uneventful post-operative stay and jejunostomy tube removal was done on post-operative day 21. On post-operative day 25, patient had two episodes of haematemesis which resolved spontaneously. Upper gastrointestinal (GI) endoscopy did not detect a possible site of bleeding. On post-operative day 27 the patient developed massive haematemesis with haematochezia. Patient was resuscitated with blood and blood products. He underwent urgent digital subtraction angiography (DSA) of the superior mesenteric artery distribution which revealed a contrast leak from the 1st jejunal branch, confirming the source of the bleed (Figure 1). This was successfully embolized with gelfoam particles, confirmed by post procedure imaging. (Figure 2).

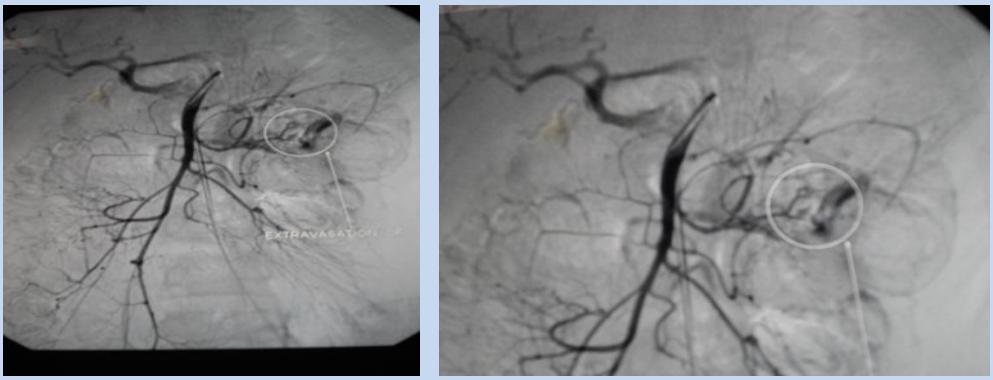

Figure 1: Digital Subtraction Angiography (DSA) of superior mesenteric artery distribution

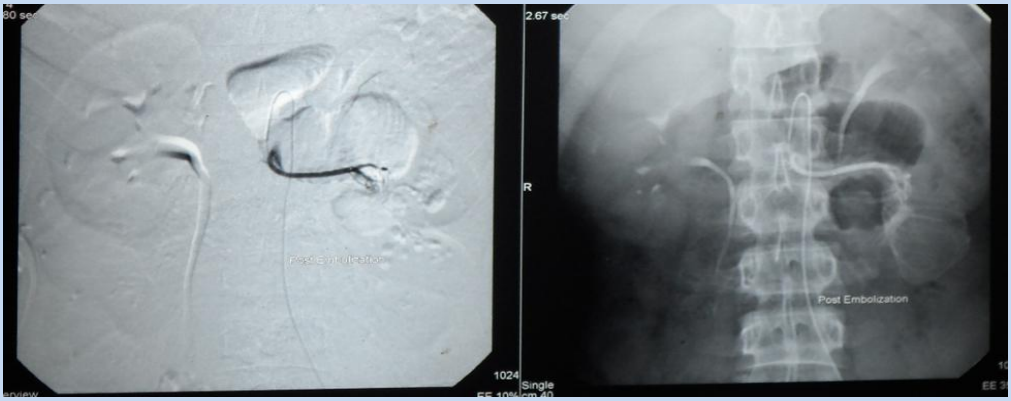

Figure 2: Post procedure imaging

Patient had an uneventful post procedure stay. Six weeks following transcatheter embolisation (TCE) the patient underwent emergency laparotomy for suspected bowel perforation and was found to have jejunal perforation at the embolization site. Primary jejuno-jejunal anastomosis was performed with resection of the perforated segment.

Discussion

Jejunostomy tube insertion is a surgical procedure in which a tube is inserted into the proximal jejunum for enteral feeding. Common complications of feeding jejunostomy include mechanical complications (3.5%) (dislocation, obstruction, migration), gastrointestinal symptoms (6.2%) (nausea, vomiting diarrhoea, constipation) metabolic disorders (2.0%) (hyperglycaemia, hypokalemia, hypomagnesaemia) infections (cutaneous or intra-abdominal abscess, peritonitis) and, uncommonly, jejunal volvulus, small bowel perforation and acute upper GI bleeding[1].

Reported cases of late onset acute upper GI bleeding following jejunostomy tube removal is a rarity in medical literature. Ischemia and ulceration of the jejunal mucosa caused by the jejunostomy tubing could be the possible mechanism.
Acute GI bleeding can be managed by conservative, radiological, pharmacological, endoscopic or surgical methods. Choice of management option depends on the indication, and availability of expertise[2].

A patient with an acute, overt, ongoing bleed needs adequate resuscitation, localization of bleeding by scintigraphy, angiography or deep enteroscopy followed by therapeutic procedures[3,4]. Super selective catheterization followed by TCE of the bleeding vessel is usually the most effective means of interrupting blood flow while maintaining bowel viability, achieving a compromise between selective arterial inflow reduction and maintenance of collateral arterial blood flow. TCE is a safe method with less than 2% chance of a major adverse event such as ischemia, mucosal ulceration or perforation of the involved bowel segment[5]. Close observation is necessary for early detection of post procedure complications.

Conclusion

Hematemesis and hematochezia following removal of a feeding jejunostomy tube is an uncommon cause of acute upper GI bleeding. DSA with super selective embolization of the bleeding vessel is an alternative to emergency surgery, and is a diagnostic and therapeutic

modality with promising outcomes in the control of acute bleeding. Ischemia, necrosis and perforation of the embolised segment of bowel are recognized post procedure complications.

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