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Can acute gastric ischemia be managed non-operatively?

Background: Acute gastric ischemia is a severe condition that can be induced by either occlusive or non-occlusive causes. The extensive gastric vascularization prevents clinical relevant ischemia to happen frequently. This rare disorder demands urgent diagnosis, but its management can be controversial.

Aim: Case report of a patient diagnosed with acute gastric ischemia associated with an adjustable gastric banding. Initial non-operative management was successfully achieved and then the band was removed.

Methods: A 49-year-old female with a bariatric procedure 15 years ago (adjustable gastric banding) was admitted at the emergency department of our hospital with severe acute abdominal pain, localized mainly on the upper abdomen and with no irradiation. No other symptoms such as nausea or vomiting were described. Abdominal defense was noted on physical examination. Laboratory results were normal except for a slight elevation of serum amylase and lipase. An abdominal CT scan revealed moderate quantity of gas at the sub-mucosal gastric space and in intra-hepatic branches of portal vein, in line with a probable diagnosis of gastric ischemia, confirmed by an upper gastric endoscopy. Since the patient was clinically stable, with no signs of shock, a non-operative approach was proposed and the patient was admitted.

Results: Treatment consisted of intravenous fluids and analgesia, and no oral intake. Patient remained clinically stable, without any signs of shock or peritonitis. Laboratory results remained normal. CT scan was repeated after 5 days and reported a partial absorption of the gastric sub-mucosal gas, no signs of portal gas and no other complications. All of the major gastric vessels were patent. The gastric band was subsequently removed on day 6, and during exploratory laparoscopy no signs of transmural gastric ischemia were found. The patient reinitiated oral intake in the first post-operative day and was discharged on day 8 without any symptoms.

Discussion: Acute gastric ischemia is a severe medical condition, associated with high morbidity and mortality. Emergent procedures may be needed if perforation or sepsis are suspected. In our case, the gastric banding was the most likely cause associated with the gastric ischemia, despite there was no evidence of slippage, migration or vascular occlusion.