

## Acute pancreatitis and obesity: where is the problem?

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### Question

A 33-year-old male patient presented at the emergency department for an acute abdominal pain. He is non-smoker and non-alcoholic. In his past history, we note a class I obesity (weight: 118 kg, height: 185 cm, body mass index 34.5) treated by the placement in another institution of an intragastric balloon (single balloon) filled with 600 mL of methylene blue-mixed saline 3 months ago. The balloon was well tolerated except some signs of reflux treated by pantoprazole 20 mg per day. He had a regular check up by his physician and a total weight loss of 19.5 kg after 3 months. He presented to the emergency department for an acute continuous epigastric pain radiating to the back started brutally 6 hours ago without fever, chills, diarrhea nor vomiting. The pain was not decreasing after taking 1g of paracetamol.

Clinical examination reveals an epigastric pain on palpation without any sign of peritonitis and negative Murphy sign, stable vital signs except sinus tachycardia (110/min). Laboratory findings included a minor inflammation (C-reactive protein 45 mg/L) with normal hepatic tests and an increase in lipase values (434 mU/mL, 7 times upper normal value). Triglyceride and calcium levels were normal. An abdominal ultrasound showed no stone in the gallbladder.

An abdominal computed tomography scan was performed (Figure 1A-B). What is your diagnosis and strategy for the patient?

### Answer

A compression of the body of pancreas by the intragastric balloon associated with peripancreatic inflammation around the body and tail is evidenced on computed tomography scan (Figure 1A-B).

Under general anesthesia and after intubation, we proceeded by removing the intragastric balloon in the endoscopy department by puncture and aspiration of +/- 600 mL of methylene-saline solution and removal of the deflated balloon by a grasping forceps (Figure 2A-B). After removal, the endoscopy showed superficial ulcers of the fundus. The clinical and biological recovery was fast and the patient was discharged 2 days later. A reevaluation after 3 months on consultation showed no sign of recurrence with a stable weight (92 kg).

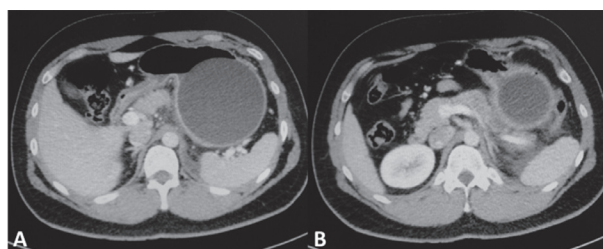


Fig. 1 — Computed Tomography Scan Results.

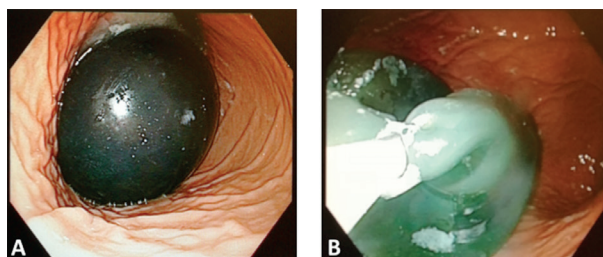


Fig. 2. — Endoscopic finding (A) and management (B)

The literature review confirms that acute pancreatitis is a rare complication of this procedure (less than 15 cases worldwide since 2004 published as case reports) and mostly due to direct mechanical compression of the pancreas through the stomach.

In conclusion, gastroenterologists should be aware that they can cause acute pancreatitis as a complication of intragastric balloon placement by a direct compression of the pancreas through the stomach.

### Conflict of interest

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