

A bariatric intervention went the wrong direction

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Clinical history

A 34 years old female patient presented to our Emergency Department with acute abdominal pain.

The abdominal discomfort had appeared one week earlier, and it was not associated to anorexia nor gastrointestinal disturbances. That day, the patient described a severe increase in the fluctuating epigastric pain (evaluated at 10/10), which was migrating toward the right flank. The pain was associated also to vomiting and bloating.

The patient had a history of recurring urinary infections, left ovarian cysts, appendicectomy, caesarean section, and placement of gastric balloon in June 2009.

The patient complained also about pollakiuria, but no dysuria.

Physical Examination

The parameters of the patient were correct.

Tenderness at the level of the epigastric region and left iliac fossa were elicited at palpation. No sign of guarding, rebound tenderness or rigidity was elicited when palpating the rest of the abdomen. No palpable mass was found. The peristalsis was normal.

Investigations

The *blood tests* showed:

Hematology		Renal function	
Hemoglobin [g/dl]	13.9	Urea [mg/dl]	19
WBC [x10 ³ /μL]	17.31 (↑)	Creatinine [mg/dl]	0.69
CRP [mg/L]	1.0	GFR [mL/min/1.73m ²]	> 60

Coagulation values were in the normal range, as well as the ionogram, LDH, liver and renal function tests and lipase.

The *urinary analysis* showed the presence of WBC (313 [/μL]) and RBC (27 [/μL]) with levels of leucocyte esterase at 500.

The *gynecological examination* revealed non-malodorous vaginal discharge and pain at the pelvic examination. The echographic examination performed by the gynecologist showed some free liquid in the pouch of Douglas. No anomalies at the level of the uterus or the ovaries were found.

The radiologist was therefore contacted, but a CT scan was at first not accepted.

We therefore performed a *plain abdominal radiography* which showed air-fluid levels, and could not demonstrate the presence of the gastric balloon in the stomach.



The radiologist therefore accepted to perform an *abdominal CT scan*, which revealed an occlusion of the small intestine due to the presence of calcified material with a metallic end and with air-fluid levels inside of it. Signs of intestinal ischemia were starting to show, but no sign of perforation was seen.



Differential Diagnosis

The differential diagnosis in this case, included:

- Mechanical obstruction due to adhesions: due to the poor surgical medical history, an obstruction on adhesions, was quite unlikely. Moreover, the passage of stools was not affected.
- Gastric perforation was not ruled in, since it could explain the abdominal pain but not the history of vomiting.

Actual Diagnosis

The image seen at the abdominal CT scan was indeed the gastric balloon which had displaced from the stomach.

Normally patients that undergo the placement of a gastric balloon should have a strict follow up, and the balloon is normally removed after 6 months. It is therefore extremely unlikely to have an intestinal occlusion due to the migration of a gastric balloon.