Case (584) Hemobezoar: a rare cause of acute small bowel

obstruction after roux-en-y gastric bypass.

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## **CASE PRESENTATION**

: A 47 year old woman presented with severe abdominal pain and nausea on the third postoperative day after laparoscopic Roux-en-Y gastric bypass (RYGB) as treatment for morbid obesity. Blood tests revealed a mild leukocytosis and a slight decrease of the hemoglobin.

A contrast enhanced CT showed dilation of the excluded stomach, duodenum, and biliopancreatic limb up to the level of the common limb where was high-attenuating material in its lumen. Diagnosis of obstructing bezoar due to blood clot at the site of anastomosis was made and the patient underwent emergency laparoscopy, which confirmed the radiological findings.

## DISCUSSION

Obesity is an increasing worldwide health problem, and its prevalence has doubled over the last 30 years. Bariatric surgery has become the most successful treatment of morbid obesity, and laparoscopic RYGB is the procedure of choice in most cases.

Radiologist's role is crucial in the early detection of the postoperative complications of gastric bypass surgery. Knowledge of the normal postoperative anatomy and common image findings of the complications is mandatory for the on-call radiologist.

Blood clot as the etiology of small bowel obstruction after RYGB is an unusual event. Common symptoms are those of mechanical obstruction of small bowel including severe abdominal pain and vomiting or less frecuently abdominal tenderness and leukocytosis.

Multiple complications can cause small bowel obstruction: anastomosis stenosis, internal hernias, strictures, intestinal bridle or less frequent causes like the bezoar.

Small bowel obstruction can develop both early after surgery and in a late stage, but bezoar obstruction is usually an early complication of surgery. CT is the most important non-invasive test in the diagnosis of small bowel occlusion and its causes, such as hemobezoar. The most important finding is to find dilated loops of bowel filled with a hyperdense fluid collection, with abrupt transition to normal or collapsed distal bowel. Emergent surgery is mandatory to avoid further morbidity or mortality.

## CONCLUSION

Blood bezoar is a very unusual cause of postoperative small bowel obstruction after laparoscopic RYGB. An obstructive blood clot should be always included in the differential diagnosis of small bowel obstruction after RYGB.

As the number of bariatric surgery procedures increases it becomes more important for the on-call radiologist to be familiar with the normal postoperative gastric bypass anatomy and the main imaging findings of its complications.

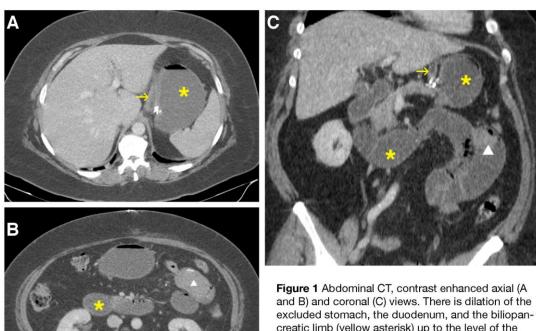


Figure 1 Abdominal CT, contrast enhanced axial (A and B) and coronal (C) views. There is dilation of the excluded stomach, the duodenum, and the biliopancreatic limb (yellow asterisk) up to the level of the common limb, where high-attenuating material in its lumen was found (white arrowhead). There was no dilation of the alimentary limb (yellow arrow). Diagnosis of obstructing bezoar due to blood clot at the site of anastomosis was made.

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