Complication after weight-reducing surgery

Case history
A 42-year-old male patient was admitted to our hospital with increasing abdominal colic pain in his left upper quadrant that he had had for two days. Four months earlier he had undergone a laparoscopic Roux-en-Y gastric bypass operation for his morbid obesity (BMI 44 kg/m²). He was nauseous but did not vomit and his defecation was normal. After two days his serum amylase level rose to 898 U/L. An abdominal CT scan with enteral contrast (Figure 1) was made to rule out pancreatitis. The CT scan revealed a normal pancreas, but a very dilated stomach remnant without contrast. It also showed some intra-abdominal fluid although there was no leakage of enteral contrast. Because the enteral contrast passed the jejunum, we concluded that the patient had an obstructive ileus of the blind left Roux-en-Y loop only.

When the patient began to clinically deteriorate, a laparatomy was performed because of suspected perforation of the obstructed loop. During surgery a rotated small intestine beyond the jejunal-jejunal anastomosis was seen. The torsion placed tension on the anastomosis that led to ischaemic damage and stenosis of the distal blind part of the Roux-en-Y bypass loop near the jejuno-jejunostomy. Because of the stenosis, the patient developed an ileus and a blow-out of his stomach remnant (Figure 2).

Background
The laparoscopic Roux-en-Y gastric bypass is one of the most common operations for morbid obesity. Late complications [1,2] of this procedure are usually internal hernias (up to 5%) or stenosis at the gastro-jejunostomy (up to 5%). Clinical signs are often nausea and vomiting. In this patient, because of the ischaemic stenosis between the pars ascendens duodeni and the jejuno-jejunostomy, the fluids of the gastric remnant, gallbladder

Figure 1. Abdominal CT scan with enteral contrast which revealed a normal pancreas, but a dilated gastric remnant.

Figure 2. Roux-en-Y gastric bypass with the stenosis that caused the blow out of the stomach. The torsion of the jejunum is not shown on this picture.

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and pancreas were not able to pass freely, which led to a dilatation of the entire left blind loop, a rise in serum amylase levels and eventually to the gastric blow-out.

The above also explains why the patient was extremely nauseous, but was unable to vomit.

**Conclusion**

We present a rare complication after Roux-en-Y gastric bypass for morbid obesity. Once more, this case shows that although bariatric surgery does effectively reduce weight [3], it also carries a risk for serious complications.

**References**

1 Kelvin D. Higa, MD, Keith B. Boone, MD, Tienchin Ho, MD. Complications of the Laparoscopic Roux-en-Y Gastric Bypass: 1,040 Patients - What Have We Learned?. Obesity Surgery; 10: 509-513

2 Kelvin D. Higa, MD, FACS, Tienchin Ho, MD, Keith B. Boone, MD, FACS. Internal Hernias after Laparoscopic Roux-en-Y Gastric Bypass: Incidence, Treatment and Prevention. Obesity Surgery; 13: 350-354