Retrograde Intussusception of the Roux limb: A rare complication after Laparoscopic Roux-en-Y Gastric Bypass

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Introduction
Intussusception is a rare long-term complication after laparoscopic Roux-en-Y Gastric Bypass (RYGB). It occurs usually near the jejuno-jejunostomy (JJ) and all three limbs of the gastric bypass can be affected. Dysmotility disorders are the most accepted etiology for intussusception after RYGB. Simple reduction +/- plication and resection with reconstruction of the JJ are two feasible therapeutic options.

Methods
We report a case of a patient presenting with such complication 28 months after primary operation and discuss its surgical management.

Results
A 24-year old woman underwent a LRYGB (antecolic and antegastric) in May 2011 for the treatment of morbid obesity (BMI 41.5 kg/m²). In September 2013 she presented herself in our emergency room with acute crampy abdominal pain, loss of appetite, nausea, vomiting and diarrhea for the preceding 24 hours. Her BMI had decreased to 25.8 kg/m² (excess bodyweight loss of 95.1%). A CT-scan showed a jejuno-jejunal intussusception of the alimentary loop with the typical “target sign” (Figure 1). The decision was made to perform an explorative laparoscopy, which revealed a 10 cm retrograde intussuscepted segment located 10 cm proximal to the JJ (Figure 2). Initially a sole reduction of the intussuscepted segment was performed. Due to persisting abdominal pain, an explorative laparoscopy was repeated 3 days postoperatively. It did not show any pathological findings and no recurrence. With hypothesis of transient intussusception we performed a total resection and reconstruction of the JJ (Figure 3). Recovery was uneventful. The patient was able to be discharged home 8 days after the second surgery in good condition. Up to now no recurrence has occurred.

Figure 1: CT-scan demonstrating a typical “target-sign”

Figure 2: Explorative laparoscopy demonstrating a retrograde intussusception

Figure 3: Schematic overview (A: Alimentary loop, B: Biliodigestive loop, C: Common channel)

Conclusion
With unspecific symptoms and possible intermittent presentation, intussusception is challenging to diagnose. CT-scan is the method of choice to confirm the diagnosis. In the case of an inconclusive CT-scan and persisting symptoms, an explorative laparoscopy is mandatory. As shown in our case, simple reduction leads to a possible recurrence of intussusception. There is no current consensus for the optimal treatment, but the literature shows a significantly higher recurrence rate of 33.3% for only reduction +/- plication in comparison to 7.7% for resection with reconstruction of the JJ. For this reason and from our experience, we advocate the latter therapeutic option.

References