Intussusception Following Roux-en-y Gastric Bypass

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Background

- As global and national rates of obesity continue to rise, the demand and need for more metabolic and bariatric surgery will also increase.
- Intussusception following RYGB is one post-operative scenario for which there is no agreed upon management strategy.
- We looked at 3 cases of intussusception, all managed differently.

Case 1

- 61 yo F with history of RYGB (4 years prior) presented with acute abdominal pain
- Denied nausea, vomiting, or changes in bowel movements; however did have weight gain
- CT AP showing intussusception of small bowel with thickened loops of small bowel (Figure 1a and 1b)
- Taken to OR for exploratory laparotomy - found that intussusception had already resolved
- Unclear which area of bowel was involved so felt no further intervention was needed
- Abdominal pain subsequently resolved and discharged home
- Further outpatient workup for weight gain revealed gastro-gastric fistula between gastric pouch and remnant, for which she underwent exploratory laparotomy with repair of fistula
- Jejunojejunostomy anastomosis was also revised as the bowel appeared boggy and dilated and was thought to likely be lead point for intussusception

Figures

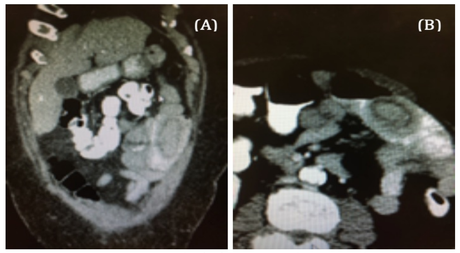


Figure 1: CT AP with (A) coronal view showing intussusception of small bowel. (B) Target sign indicating intussusception



Figure 2: CT AP showing intussusception at the J-J anastomosis with contrast distal to the site of intussusception

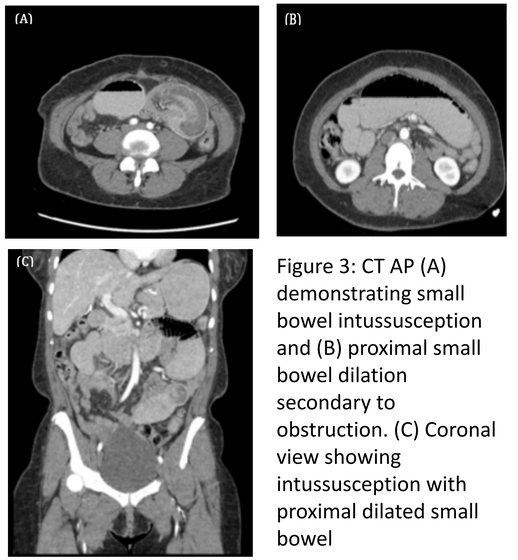


Figure 3: CT AP (A) demonstrating small bowel intussusception and (B) proximal small bowel dilation secondary to obstruction. (C) Coronal view showing intussusception with proximal dilated small bowel

Case 2

- 37 yo F with history of RYGB (12 years prior) presented with 1 day of abdominal pain, nausea and emesis
- Physical exam with soft abdomen and only mild tenderness
- CT AP with PO contrast demonstrated retrograde intussusception at the J-J anastomosis but with contrast present distal to site of intussusception and a decompressed gastric remnant (Figure 2)
- Based on physical exam and imaging, elected to admit for observation and perform serial abdominal exams with non-operative management
- Pain resolved by the following day
- Patient then left against medical advice and has yet to follow up

Case 3

- 47 yo F with history of RYGB complicated by a marginal ulcer requiring revision presented with epigastric abdominal pain and coffee-ground emesis
- CT AP demonstrated intussusception of small bowel with dilation proximal and air-fluid levels dilating the gastric pouch and Roux and Y limbs, concerning for obstruction
- Taken to the OR for exploratory laparotomy with point of intussusception 20 cm distal to the J-J anastomosis, which was reduced with gentle traction and then resected as this area of bowel had an abnormal firmness
- Also had placement of gastric tube into remnant stomach

Conclusions

- Range of treatment options for managing intussusception after RYGB
- Resections seems to be the most commonly performed procedure with lowest risk of recurrence
- Should consider operative interventions such as resection or enteropexy as data seems to lean towards recurrence when intussusception is left untreated
- Definitive research is lacking but due to rarity of the condition, may not be possible to study the problem fully

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