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Title

Insult to injury: *de-novo* Crohn's disease after SADI-S.

Introduction

Inflammatory bowel disease (IBD) has traditionally been considered a contraindication for bariatric surgery as both entities produce a malabsorptive phenotype. However, the rationale for reversing bypass surgery after a post-operative IBD diagnosis is unclear, particularly with the relatively novel single anastomosis duodeno-ileal bypass with sleeve gastrectomy (SADI-S).

Methods

We report a case of *de-novo* Crohn's disease in a patient who previously underwent a primary SADI-S.

Results

A 51-year-old female presented to our bariatric service seeking bypass surgery for weight loss. Her preoperative BMI was 54.7. She has a background of hypothyroidism. She underwent a primary SADI-S bypass with an unremarkable postoperative course, and her 6-month follow up BMI was 34.7. 10 months following her SADI-S procedure, she presented to the emergency department with a monthlong history of intermittent abdominal pain and diarrhoea. CT imaging demonstrated circumferential mural thickening and fat stranding in multiple segments

of small and large bowel, and a colonoscopy demonstrated multiple areas of acute colitis, consistent with an acute Crohn's disease flare. Her BMI at admission was 28, with a total weight loss of 72kg. At presentation, her serum albumin was 16 g/L, iron 10.7 $\mu\text{mol/L}$, B12 >1476 pmol/L, folate 9.4 nmol/L, and haemoglobin 83 g/L. Her flare resolved with oral budesonide, mesalazine, and a week-long period of total parenteral nutrition. At discharge, her serum albumin improved to 21 g/L, iron B12 660 pmol/L, folate 18.8 nmol/L, and haemoglobin 89 g/L. Her Crohn's disease remains well controlled on azathioprine at 12 month follow up.

Conclusion

De-novo Crohn's disease following a SADI-S presents a concern for malabsorption. There is a paucity of literature on the rationale for SADI-S reversal in such patients. This case demonstrates that adequate nutritional control can be achieved with medical management.