A rare cause of small bowel obstruction which should always be considered

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Introduction: Appendicitis has been known to cause acute small bowel obstruction through mechanical and physiological interactions with the ileum. Here a 52 year old male, who, following 3 days of lower abdominal pain, bowels not having opened and vomiting was found on computed tomography (CT) scan to have a mechanical small bowel obstruction. This was operated on via lower midline laparotomy and adhesiolysis. An inflamed appendix was found to have wrapped itself around the terminal ileum causing a focal stricture. After appendectomy the patient was discharged 6 days later and made a full recovery.

Case description: A 52 year old man with a past history of GORD, hypertension and peripheral vascular disease (with aorto-bifemoral bypass) was admitted onto our Surgical Triage Unit (STU) at 22:10 on a Thursday evening. He complained of a 3 day history of illness consisting of cramping lower abdominal pain, bowels not having opened and recurrent bilious vomiting.

Results and Conclusions: An urgent CT scan reported “High grade small bowel obstruction, with change of calibre in the distal ileum. This may be secondary to adhesions (previous bilateral femoral bypass) or internal hernia. Incidentally, the appendix also looks inflamed. No perforation or intra-abdominal collections.” At laparotomy, the appendix was inflamed with free pus in the peritoneal cavity and dilated small bowel loops in the vicinity. On closer inspection it could be seen that the inflamed appendix had wrapped itself around the terminal ileum ste-nosing its lumen and causing the small bowel obstruction.

Take home message:
- Always consider a concurrent appendicitis in cases of small bowel obstruction
- Do not exclude an appendicitis in cases of left sided abdominal pain as was the case here
- If suspected consider performing computed tomography before proceeding to surgery
- The co-existence of these two pathologies may alter operative approach

Diverticulitis: An atypical presentation

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Introduction: Diverticulitis is a well described inflammatory condition of the wall of the gastrointestinal tract with an overall prevalence of 2-10% in developing countries. Typically, the descending and sigmoid colon are affected more commonly than the ascending colon and small bowel in the Western population. Diverticula of the distal ileum are particularly uncommon, with a reported rate of 0.06-1.3% (Jeong et al. 2014). Due to difficulty in pre-operative diagnosis, there is no consensus on therapeutic strategy for right-sided diverticulitis (Lee et al. 2010). Here, the authors present a case of non-Meckel’s diverticulitis of the distal ileum in a Caucasian U.K. patient.

Case description: A 63 year old man presented to the Emergency Department with a one day history of abdominal distension, periumbilical pain radiating to the right iliac fossa, nausea and sweats. He had not defecated for 2 days but reported passing flatus. Past medical history included gout, rheumatoid arthritis and Ulcerative Colitis, managed with Sulfasalazine. He was not a smoker.

On examination, abdomen was visibly distended. There was maximal tenderness in the lower central abdomen and guarding to palpation. Digital rectal examination was normal. Chest radiograph was unremarkable. Plain abdominal film showed faecal loading of the colon, but no obstructive features. C-Reactive Protein (CRP), amylase and white cell count on admission were normal. On repeat testing, CRP was 208mg/L, white cell count 10x10⁹/L, venous lactate 2.3mmol/L, and haemoglobin 13.1g/L.

Intravenous fluids and broad spectrum antibiotics were commenced. CT imaging was arranged in view of the severity of symptoms, biochemical findings, patient’s age, medication and history of colitis. CT abdomen pelvis with oral contrast showed a severely inflamed ileal diverticulum. There was no suggestion of a diverticulitis on previous radiological or endoscopic investigations. The patient proceeded to surgery for open resection of perforated diverticulum (39cm of ileum) and small bowel anastomosis.

Results and Conclusions: After 24 hour High Dependency observation, the patient made an uneventful recovery. Histological analysis confirmed a thin-walled, diffusely ulcerated, perforated ileal diverticulum resulting from obstructing food.

Anatomically, diverticula are characterised by herniation of mucosa and submucosa through the muscular bowel wall and a true diverticulum should involve all layers. Diverticula of the small bowel are more commonly proximal (75% jejunal, versus 5% ileal). The position, conversely to a Meckel’s diverticulum, is usually on the mesenteric side of the bowel. The aetiology of jejuno-ileal diverticula is not fully understood however focal muscular weakness, motility dysfunction, high segmental intraluminal pressure and biogenic factors are believed to contribute (Nakatani et al. 2016).

There is close clinical and biochemical overlap between a presentation of appendicitis and right sided diverticulitis. However, previous studies have suggested subtle clinical variations to aid their distinction, such as duration.