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SURGICAL IMAGES

Small bowel obstruction due to residual appendix



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KEYWORDS

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MOTS CLÉS

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Coelioscopie ;
Appendicite

Mechanical small bowel obstruction is a potential complication of appendectomy and is usually caused by the presence of post-operative adhesions [1]. Laparoscopic appendectomy has reduced the incidence of post-appendectomy bowel obstruction (OR=0.33). Other risk factors include appendicular perforation and abscess formation in addition to severe co-morbid conditions and low activity level of the surgery unit [1,2].

When the appendicular stump measures more than 0.5 cm there is an increased risk of appendicitis, but also an increased risk of small bowel obstruction [3,4]. Gordon et al. report a case of mechanical small bowel occlusion that developed 10 days after appendectomy [4]. A stapler had been used to ligate and section the appendix. This led to a more distal section than obtained with meso-appendicular dissection and elective ligation of the appendicular base.

Here we report a case of appendicular peritonitis that developed in a 28-year-old patient four years after immediate post-partum laparoscopic appendectomy. The patient presented with sudden-onset symptoms of bowel obstruction that had developed in the last 24 h. Computed tomography revealed typical distal small bowel obstruction with a junctional zone and a feces sign upstream from an adherence visualized linking the cecum and the mesenteric fat (Fig. 1). An abundant intra-peritoneal effusion suggested bowel suffering but contrast enhancement was nevertheless observed in the bowel loops. Exploratory laparoscopy confirmed distal small bowel obstruction with volvulus of the last loop and an adherence to a long appendicular stump (Fig. 1). Section of the adherence and complementary appendectomy led to favorable post-operative outcome (Fig. 2).

A second reading of the initial operative report showed that the operation had been complicated because of a purulent abscess and post-partum peritonitis with a mesocolic appendix. The difficult intervention apparently led to the abandon of a long appendicular stump.

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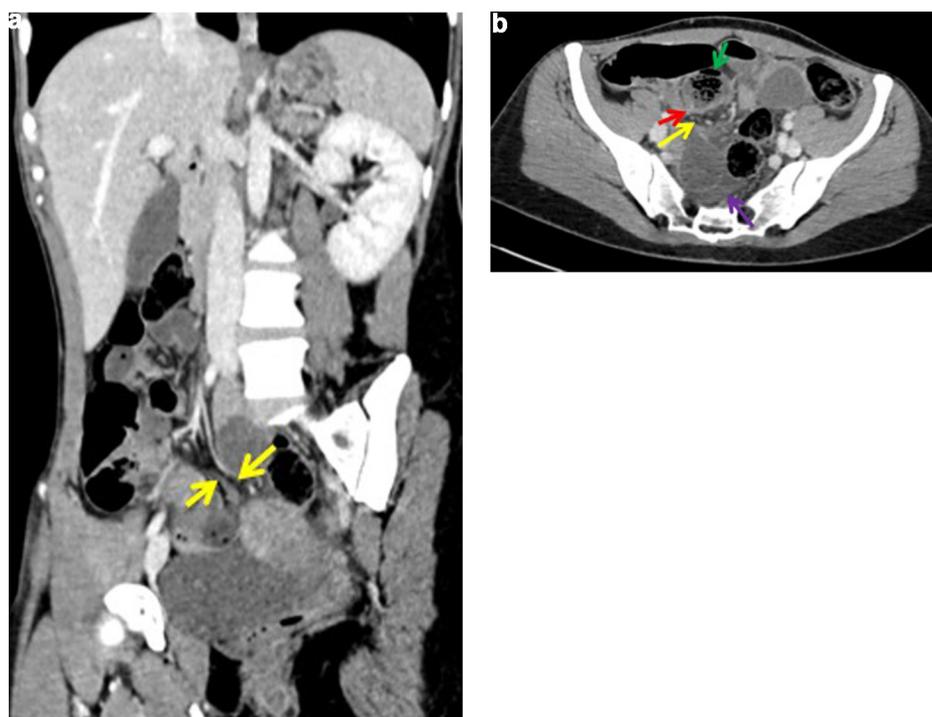


Figure 1. Computed tomography scan. a: coronal slice showing long appendicular stump (between yellow arrows) communicating with the cecum and leading to an adhesion causing the bowel obstruction; b: axial slice showing the appendicular stump (yellow arrow) in a restrictive zone, a junction zone (red arrow) and upstream dilatation (green arrow) with feces sign as well as an intraperitoneal effusion (violet arrow).

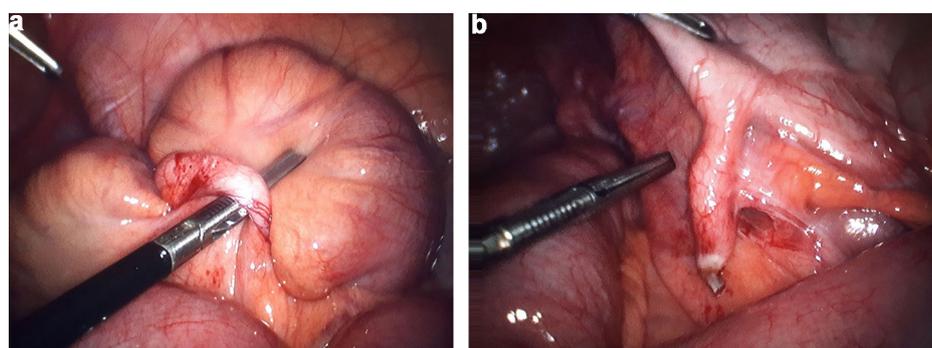


Figure 2. Intraoperative view showing the appendicular stump and the obstructive adherence before (a) and after (b) laparoscopic release.

It is important to leave an appendicular stump as short as possible to prevent the risk of recurrent infection and small bowel obstruction. A long appendicular stump should be entertained as a potential cause of mechanical small bowel obstruction.

Disclosure of interest

The authors declare that they have no competing interest.

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