SURGICAL IMAGES: SOFT TISSUE

Mucinous cystadenoma of the appendix

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A 61-year-old man presented with chronic intermittent right iliac fossa pain that had lasted for a few years. His medical history included chronic obstructive airway disease and old pulmonary tuberculosis. Colonoscopy revealed a 3-cm smooth bulbous submucosal mass at the cecum just behind the ileocecal valve (Fig. 1). Biopsy of the lesion did not confirm any disease. A contrast-enhanced computed tomography (CT) scan of the abdomen revealed a hypodense and distended tubular structure (1.7 × 5.3 cm) that originated from the cecal pole, the features of which were compatible with a mucinous neoplasm of the appendix (Fig. 2). Because the base of the appendiceal mass was broad and seemed to be contiguous with the cecal wall on CT, we considered an appendectomy alone to be unsafe because there would be considerable risk of peritoneal spillage of mucin during transection of the appendix. We performed a laparoscopic-assisted right hemicolectomy instead (Fig. 3). Histopathological examination of the resected specimen revealed mucinous cystadenoma of the appendix without evidence of cancer. The patient made an uneventful recovery after surgery and was discharged on postoperative day 7.

Mucinous cystadenoma is a rare cystic neoplasm of the vermiform appendix characterized by villous adenomatous changes of the appendiceal epithelium associated with marked distension of the appendiceal lumen with mucin. The most common presentation is right iliac fossa pain, similar to an acute appendicitis; however, about 25% of patients are asymptomatic and the condition is found incidentally on imaging or at the time of surgery.[1,2] Other reported complications include intestinal obstruction, intussusception, gastrointestinal bleeding and extrinsic ureteral compression. The most fearful complication is pseudomyxoma peritonei secondary to spontaneous or iatrogenic rupture of the appendix and consequent spillage of neoplastic cells and mucin into the peritoneal cavity. A correct preoperative diagnosis is thus important to help in

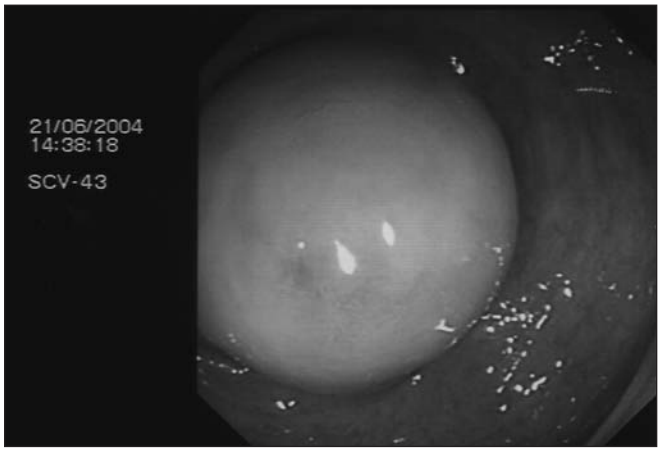

Fig. 1: Colonoscopic image showing a 3-cm smooth bulbous submucosal mass at the cecum.

Fig. 2: Contrast-enhanced computed tomography scan of the abdomen showing a hypodense and distended tubular structure originating from the cecal pole (arrow).

Fig. 3: The right hemicolectomy specimen.

the choice of surgical tactics and to avoid iatrogenic rupture and peritoneal spillage of mucin during surgery.

As illustrated in our patient, both colonoscopy and CT can facilitate the preoperative diagnosis of mucinous cystadenoma of the appendix. The use of laparoscopy can allow a better evaluation of the lesion intraoperatively and assist in surgical planning. With the availability of surgeons experienced in minimally invasive surgery, laparoscopic-assisted right hemicolectomy can be safely performed for mucinous cystadenoma or cystadenocarcinoma of the appendix to minimize the unnecessary complication of peritoneal spillage of mucin, which may occur during open or laparoscopic appendectomy. Moreover, the patients benefit from minimally invasive surgery, including a smaller wound and faster convalescent period.[3]

Competing interests: None declared.

References

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