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Excision of small intestine epiploic appendage: Over-estimated or not?

Dear Editor,

Epiploic appendages (EA) are pedunculated enlarged fat structures of mesentery found mostly along the transverse and sigmoid colon, but rarely at jejunum and ileum. While many colonic epiploic appendagitis have been reported due to complications, such as torsion, obstruction, venous thrombosis and inflammation, there are only few reports on preoperative diagnosis of small intestine EA and recommendations on uncomplicated lesions found incidentally at laparotomy (1-3). We describe a case of 58-year-old woman with medical history of sigmoid resection with Hartmann procedure due to sigmoid torsion. She presented with diffuse interloop adhesions and EA of ileum at re-laparotomy. Physical examination revealed tenderness near colostomy opening. All biochemical tests and abdominal ultrasound were normal. Based on the previous history we decided to close the colostomy. During the laparotomy, we found multiple interloop adhesions and an ileum segment with three pedunculated EA sized 4-5 cm (Figure 1) with no evidence of complications on macroscopic examination.

Colostomy was reversed and end-to-end colorectal anastomosis was performed. We decided to excise the EAs because of the risk for torsion or strangulation of small intestine (Figure 2). The EAs were reported on histopathology as adipose tissue. The patient was discharged after 7 days with no postoperative complications.

Small intestine EA is a rare condition, initially described by Mittal et al. in 1981(3). To our



FIGURE 1. Intraoperative appearance of epiploic appendage at the ileum



FIGURE 2. Macroscopic appearance of epiploic appendage after the excision



UNIVERSITY OF SARAJEVO FACULTY OF HEALTH STUDIES © 2016 Mehmet Yildirim, *et al.*; licensee University of Sarajevo - Faculty of Health Studies. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/2.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. knowledge, there are only a few reports about complicated EA of small intestine and none of them reporting coexistence of EA and multiple adhesions between intestinal loops in a patient. Although our patient did not have any complications, pedunculated shape and excessive mobility of EA make them prone to torsion and ischemia (4), thus affecting our decision to excise them. Differential diagnosis of EA includes many complications, such as diverticulitis, appendicitis, omental infarction etc. However, preoperative diagnosis with image studies in a patient without previous surgical procedures may be relatively easy. Nevertheless, in a patient with multiple adhesions as in our case, clinical symptoms could be challenging and differentiation from appendicitis and diverticulitis may be impossible.

In conclusion, small intestine EA may not be considered during the diagnostic process because of the absence of specific symptoms, as seen in our case. In case of diagnosis of small intestine EA preoperatively, the potential risk of complications should be considered and patients should be followed up carefully. Surgical excision of EA should be performed in cases of increased risk for complications, such as in patients with adhesions or other abdominal pathology.

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