LETTER TO THE EDITOR

Surgical conduct in case of intraoperative detection of a Meckel’s diverticulum in Crohn’s disease

Dear Sir,

Meckel’s diverticulum (MD) is a congenital alteration (found in about 2% of the population) due to incomplete involution of the omphalomesenteric tract, appearing as an outpouching of the intestine located approximately 60 cm from the ileocecal valve. Its prevalence among Crohn’s disease (CD) patients is debated: Andreyev reported a three-fold higher prevalence in pathology specimens after 294 ileocolic resections,1 while Freeman more recently refuted this assertion reporting a 1% prevalence of MD among 877 patients with CD.2

At our institution a 40-year-old woman with a long history of ileocecal CD developed recurrent subocclusive symptoms despite medical therapy and was submitted to surgery after multidisciplinary consult. The ileocecal stricture could not be overcome by the endoscope and MRI-enterography showed a 20 cm stricture in the terminal ileum with dilation of the pre-stenotic bowel. Laparoscopic exploration confirmed pre-operative data and revealed in addition the presence of a MD in a macroscopically disease-free segment, 15 cm proximally from the planned resection margin. A laparoscopic ileocecal resection and a stapled diverticulectomy were performed. The postoperative course was uneventful and the patient was discharged on day 4 according to our enhanced recovery program for patients with inflammatory bowel disease. Pathology confirmed the diagnosis of stricturing CD, with presence of granulomata; the MD was found to have active CD in its apex, while its neck and the stapled resection margin were not affected (Fig. 1).

Detection of a MD during surgery is an indication to resection in the general population because of its potential complications as bowel obstruction, bleeding, inflammation with possible fistulization. Only five cases of CD in MD have been reported in the literature3-7; in 2 of these cases, CD was confined within the MD without direct extension from the adjacent bowel.5,6

Even though prevalence of MD in CD is low, being at least similar to that of the general population, it is relevant to establish the surgical conduct in cases with an incidental intraoperative detection. Freeman reports that detection of MD influenced surgical management resulting in a more proximal resection margin to include the diverticulum within

Figure 1  A: Meckel’s diverticulum: inflammation of mucosa and submucosa with predominant lymphocytes in nodular pattern, associated with architectural alterations with blunted and irregular villi, mucosal ulceration and fissures (hematoxylin–eosin, original magnification ×20). B: Meckel’s diverticulum: island of normal mucosa demonstrating the typical Crohn’s disease patchy inflammation pattern (hematoxylin–eosin, original magnification ×40).

KEYWORDS
Meckel’s diverticulum; Crohn’s disease; Surgery
the specimen. Based on limited available data, we may con-
clude that, in the absence of macroscopic disease involve-
ment, the aforementioned approach may lead to unjustified
sacrifice of healthy bowel. Therefore, stapled diverticulec-
tomy may be a reasonable and safe alternative in this setting,
avoiding potential complications from MD and allowing to
spare precious disease-free bowel.

Conflict of interest

None.

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11 August 2011