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LETTER TO THE EDITOR

Mesenteric fibromatosis affecting duodenum and jejunum

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Dear Editor:

A 44-year-old white female patient was admitted with fever and light pain in the mesogastrium with extension to the left flank. She also complained of menometrorrhagia and pain in the profound abdominal examination. She was submitted to appendicectomy 3 years before. CT scan evidenced a heterogeneous nodular lesion in the mesentery, involving the fourth duodenal portion and the initial jejunal segment, measuring 5.4 cm in diameter. Laparotomy was performed with resection of the third and the fourth duodenal portions and the first jejunal segment. The lesion was close to superior mesenteric vessels. A latero-lateral anastomosis between the second duodenal segment and proximal jejunum was performed. The surgical specimen consisted of an angulated segment of the small intestine, which measured 9.0 cm in length, and exhibited, in the mesentery, a hard ovoid nodule, which measured 5.4×5.4×5.3 cm. Microscopic examination revealed a homogeneous proliferation of mesenchymal spindle cells arranged in bundles, with low mitotic index, no evidence of necrosis, and few hypercellular areas. The immunohistochemical analysis revealed that the tumor cells expressed vimentin, alpha-actin smooth muscle, and beta-catenin, but not CD117, AE1/AE3, desmin, CD34, and progesterone receptor. Histopathology and immunohistochemical findings were compatible of mesenteric fibromatosis. The patient was discharged with 1 week without any complication. After 1 year, another abdominal CT was performed without any signs of recurrence. The patient has no complain after 3 years of follow-up.

Fibromatosis is a benign tumor composed by fibroblasts and myofibroblasts with uniformly bland nuclear features, which often arises from the abdominal wall or the extremities and rarely from the mesentery and abdominal organs. Mesenteric fibromatosis arising from the mesentery of the small or large intestine is rare. The lesions are associated with local recurrences, lack cytologic features of malignancy, show scanty or low mitotic index, and lack capacity to determine metastases distantly. The etiology of mesenteric fibromatosis is still unknown. Patients frequently show a history of surgical procedure: our patient had previous appendicectomy.

Radical resection with wide margins is the principal aim. Nevertheless, sometimes, the tumor extension prevents a complete surgical excision. In this case, alternative treatments may be a better choice, like radiotherapy, chemotherapy (dactinomycin, vincristine, and cyclophosphamide—singly or in combination), non-steroidal anti-inflammatory drugs, hormonal manipulation (tamoxifen, aromatase inhibitors, or gonadotropin-releasing hormone agonists), and molecular target therapy (sorafenib, sunitinib, and imatinib). With complete surgical resection, local recurrence rate varies from 25 to 50 % in most studies.

To our knowledge, this is the first documented case of successful margin-negative resection of the third and fourth duodenal segment mesenteric fibromatoses reconstructed with the second duodenal portion.

Conflict of interest We declare that the manuscript submitted to your journal has not been published before, and it is not under consideration for publication elsewhere. This manuscript has been approved by all co-authors, as well as the ethics committee of our hospital. We confirm that all authors fulfilled all conditions required for authorship and approved the submission. We do not have a financial relationship with any organization or institution. We, the authors, have full control of all primary data. We declare that we have no conflict of interest.

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