Spontaneous isolated mesenteric fibromatosis associated with small bowel obstruction

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To the Editor,

Mesenteric fibromatosis is a locally aggressive myofibroblastic proliferation of the mesentery and has the ability to infiltrate or recur but not metastasize (1).

A 65-year-old female presented with history of sudden severe abdominal pain associated with nausea and vomiting. On physical examination, the patient had abdominal distension with the mid-abdomen tenderness. A computed tomography (CT) scan of the abdomen revealed the presence of internal hernias (Fig. 1). An exploratory laparotomy was performed which showed adherences between nodules of the small intestine's mesentery and the upper jejunum near the ligament of Treitz and a dilated remote bowel. Microscopic examination showed fascicles of spindle cells surrounded by fibrillar collagen with few mitotic figures (Fig. 2). Immunohistochemistry revealed the tumor cells to be negative for CD 117 and desmin, but positive for β-catenin stains consistent with the diagnosis of mesenteric fibromatosis.

Mesenteric fibromatosis is a type of fibroblastic proliferation affecting the mesentery. SIMF(spontaneous isolated mesenteric fibromatosis) occurs spontaneously as a primary mesenteric tumor without sex preponderance, in the absence of any predisposing factors and without association with other diseases. It is extremely rare, only a few cases have been reported in the literature (2) Depend on the enhanced CT features as Ko SF et al (3) showed, the SIMFs were categorized into the following four morphologic patterns: well-defined inhomogeneous mass ; well-defined homogeneous mass ; well-defined mass with large cystic parts and infiltrative mesenteric mass. Our case reveals a well-defined and homogeneous mass in the mesentery without lymph node involvement.

Microscopically, SIMF is characterized by a spatially homogenous proliferation of wavy spindle cells in a collagenous stroma. The mitotic count is relatively low with no evidence of necrosis and nuclear dedifferentiation. Immunohistochemistry showes diffuse nuclear positivity forβ-catenin in mesenteric fbromatosis but not in gastrointestinal stromal tumor and sclerosing mesenteritis (4) The underlying mechanism of β-catenin expression in mesenteric fibromatosis is currently not precisely understood.

The preferred treatment is local surgical excision with a margin of uninvolved tissue (1). Local recurrence rate is 25-50 % at 5 years even after complete surgical excision in many studies (5). This may results from the multicentric disease or surgical trauma as a new precipitating factor. The effects of radiation therapy on treatment are obviously and some studies revealed that adjuvant radiation therapy reduces recurrence of mesenteric fbromatosis to 20-40% (6). Medical therapy of mesenteric fibromatosis is not defined and it can include anti-estrogens, NSAIDs, cytotoxic chemotherapy and so on, but the effect is still unclear.

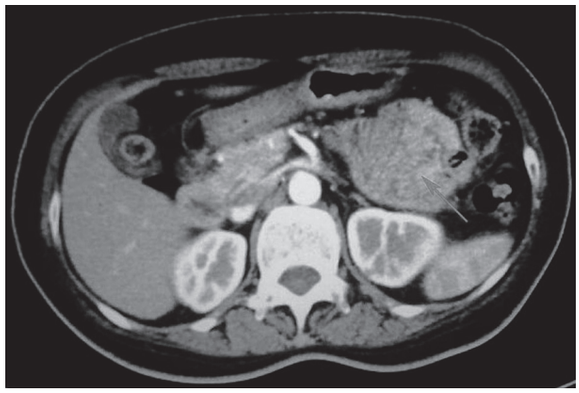

Fig. 1.

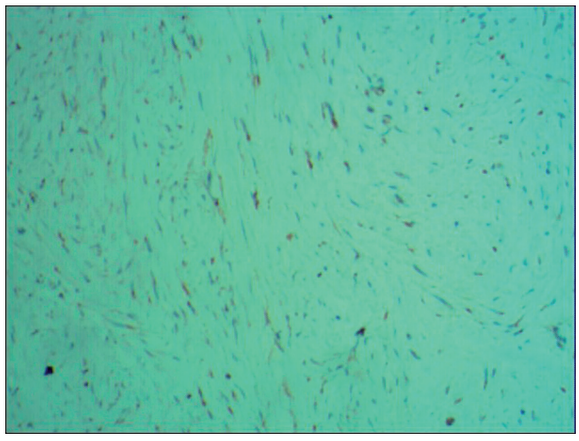

Fig. 2.

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