Multicentric infantile myofibromatosis of the small bowel detected by video capsule endoscopy in a child

Infantile myofibromatosis (IMF) is a rare group of reactive lesions. Their clinical, radiological, and pathological features may be confused with those of malignancy. The lung and mediastinum are the most common site of IMF in all pediatric age groups [1-4].

We present a case of a 9-year-old boy presenting with a history of recurrent abdominal pain and chronic diarrhea since the age of one. He was under the third percentile for weight (16kg) and height (106 cm). Physical examination and laboratory findings were normal. Abdominal computed tomography (CT) showed a nodular lesion of the liver (segment IV), cholelithiasis, and nephrolithiasis. CT of the thorax showed a lesion measuring 3.9×2.2×2.6 cm in the inferior left lung with bronchial and pulmonary vein invasion and mediastinal lymph nodes.

The patient underwent upper endoscopy and a subepithelial lesion with a central depression was found in the greater curvature of the gastric body. Colonoscopy showed multiple subepithelial lesions with a central ulceration, some of them with fibrin, varying in size from 3 mm to 20mm (**> Fig. 1**). Video capsule endoscopy (MiroCam; Intromedic, Seoul, Korea) showed two lesions in the jejunum similar to those found in the colon and stomach (> Fig. 2; > Video 1). Endoscopic ultrasonography of the colon with 15-MHz miniprobes showed a well-delimited, hypoechogenic, homogeneous, fusiform lesion with a central ulceration originating from the muscle layer, measuring 9.2×13.2 mm (**▷** Fig. 3).



Fig. 1 Colonoscopic image of the subepithelial lesion.



Fig.2 Video capsule endoscopy showing two subepithelial lesions in the jejunum.

Video 1

Video capsule endoscopy shows small-bowel tumors in multicentric infantile myofibromatosis.

Biopsies were taken from the gastric and colonic lesions and a pathological diagnosis of IMF was made. The peripheral area showed spindle cells (myofibroblasts) with eosinophilic cytoplasm and ovoid nuclei, with less differentiated, rounder cells with pale cytoplasm and basophilic, small round nuclei in the central portion. No cellular anaplasia was present and there were few mitoses. The mesenchymal cells stained with vimentin and actin. but were uniformly negative with CD117, CD34, Ki-67, MIB-1, and S-100 antigen. Aerobic, anaerobic, and mycobacterial cultures obtained from the specimen were negative.

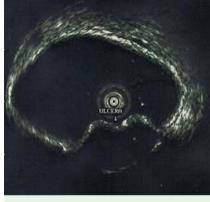


Fig. 3 Endoscopic ultrasonography of the colon with 15-MHz miniprobes showing a well-delimited, hypoechogenic, homogeneous fusiform lesion with a central ulceration, originating from the muscle layer.

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