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Clinical image. Chylolymphatic mesenteric cyst in a 3-month old infant

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Abstract: Chylolymphatic mesenteric cysts are extremely rare among children. Herein we report a case of a 3-month old infant that was admitted to the Emergency Department due to repeated vomiting. Preoperative ultrasonography demonstrated the presence of a thin-walled multiloculated cystic lesion in the right abdomen. Patient underwent then elective surgical excision. Histopathological examination documented the diagnosis of cystic lymphangioma type III, according to Lozanoff classification.

Keywords: mesenteric cyst, lymphangioma, child, vomiting.

Introduction

Mesenteric cysts account almost for 1/12,000 pediatric admissions to the Emergency Department due to repeated vomiting. Despite the fact that mesenteric cysts in general are frequently reported in the literature, chylolymphatic mesenteric cysts are extremely rare in pediatric population [1].

Case description

A male infant, 3 months old, was admitted to the Emergency Department due to repeated vomiting of undigested material. Physical examination revealed tenderness in the right abdomen, whereas feeding provoked vomiting with bilious content. Ultra-

sonographic examination confirmed the presence of a multiloculated cystic lesion with thin wall in the right abdomen (Fig. 1). Scheduled surgical exploration revealed a lobed cystic lesion located in the mesentery, at the start of the ileum, attributed to a cystic lymphangioma (Fig. 2, 3). The adjacent intestinal helix was resected along with the cyst, followed by an end-to-end intestinal anastomosis in two layers (Fig. 4). Histological examination of the specimen documented the diagnosis of cystic lymphangioma type III, according to Lozanoff classification (Fig. 5). Postoperative course was uneventful and patient was discharged home in good general condition.

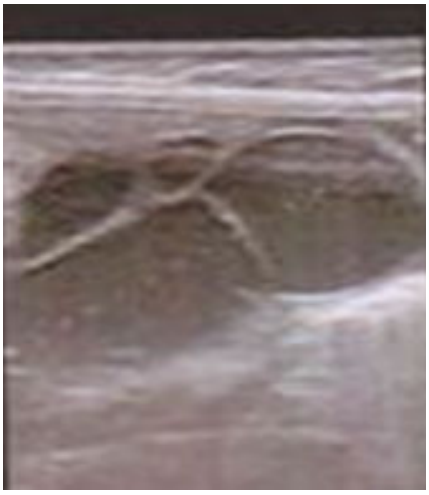

Fig. 1. Ultrasonogaphy revealing a spacious cystic entity with thin wall in the right abdomen, adjacent to the small intestine.

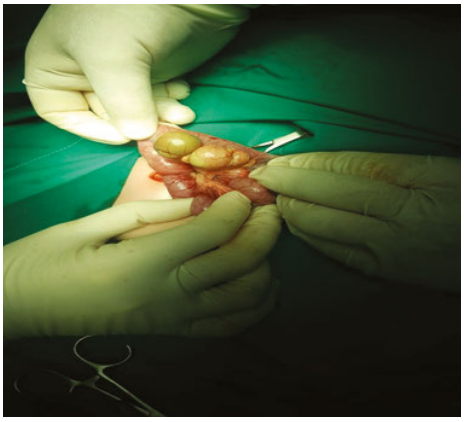

Fig. 2. Multiloculated cystic lesion found in the mesentery at the start of the ileum.

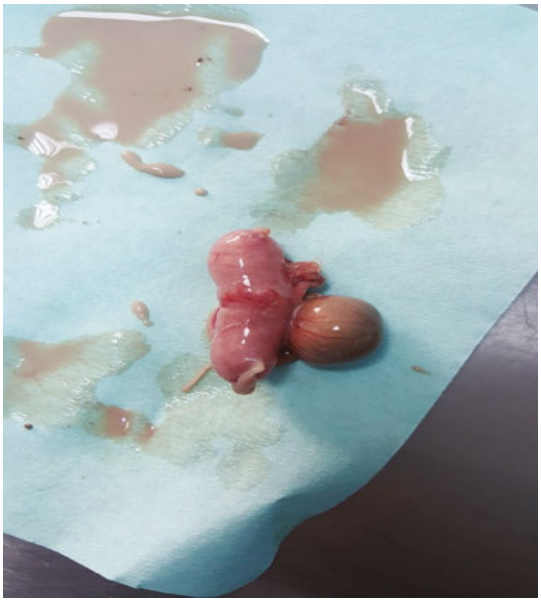

Fig. 3. Surgical specimen of the multiloculated cystic lesion.

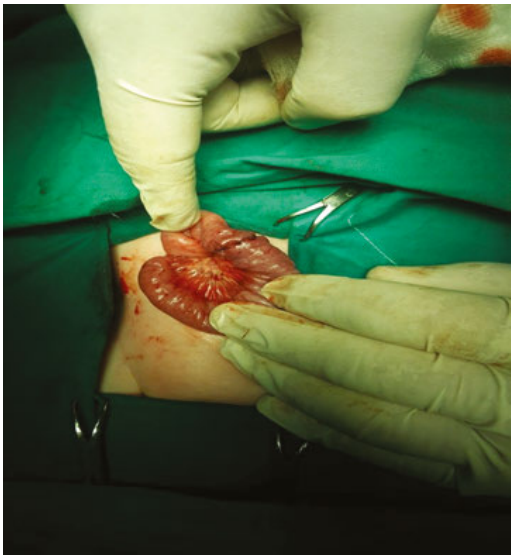

Fig. 4. Restoration of the continuity of the small intestine by performing an end to end anastomosis of two stumps.

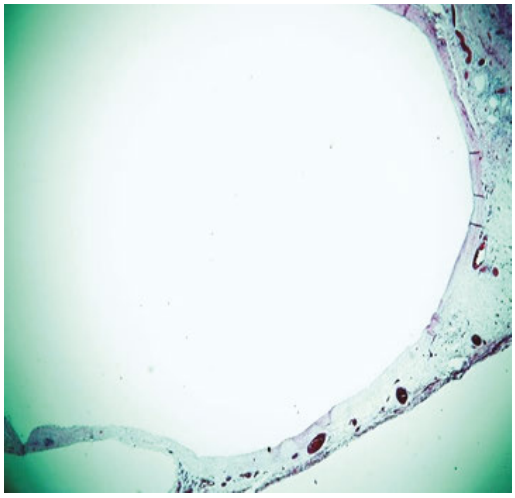

Fig. 5. Histological examination revealed a thin wall constituting of fibrous capsule and thin endothelium, filled with chylous and lymphatic fluid (hematoxylin & eosin stain, ×100).

Discussion

The localization of a cystic lymphangioma in the mesentery is extremely rare. The screening ultrasonographic finding of a thin-walled, usually mobile, polycystic lesion, contributes to the differential diagnosis from a duplication cyst [2, 3]. In a chylolymphatic mesenteric cyst, a 'fluid-fluid level' can be depicted in ultrasonography due to the formation of an upper fluid level by the lighter chyle over a lower fluid level of the heavier lymph [1].

Clinical message

The chylolymphatic mesenteric lymphangioma type III is located within the mesentery and its removal along with the adjacent intestinal helix constitutes the treatment of choice to secure the intestinal blood supply [4, 5]. Complete excision of the cyst is curative and is associated with excellent overall prognosis [1, 4, 5].

Conflict of interest

None declared.

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