CASE REPORTS

CYSTIC LYMPHANGIOMA OF THE SMALL BOWEL MESENTERY, PRESENTING AS ACUTE INTESTINAL OBSTRUCTION

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INTRODUCTION

Lymphangiomas are most commonly (95%) located in the neck, axilla and mediastinum. The remaining 5% are found in the abdominal cavity (mesentery, omentum and reteroperitoneum). The case is being presented because of the uncommon location of cystic lymphangiomas in the mesentery [1]. We wish to report on a case of cystic lymphangioma of small bowel mesentery in a girl of six years, who presented with three days history of acute intestinal obstruction, diagnosed by exploratory laparotomy and confirmed by histopathology.

CASE REPORT

A six years old girl presented to the Railway hospital Rawalpindi complaining of abdominal distention, vomiting and absolute constipation for the last three days. Past history revealed that she was operated upon for meningomyelocoele three years ago and had spastic paraplegia of left leg since then. Her family history was negative.

The gangrenous part of the gut was resected and anastomosis was done. The resection specimen sent for histopathological examination, consisted of intestine 26 cm in length, 2 cm in diameter and was dusky red in colour, coiled upon it. The mesentery contained partly cystic and partly solid mass measuring 9 cm across. On opening, it was a multilocular cyst with thin septae containing white chylous fluid. The cut surface was pearly white in the solid area. The larger locule measured 6 cm across.

Microscopy showed small intestine containing ischemic necrosis of the villi due to fibrin thrombi in the mucosal vessels. The submucosa, the muscle wall and serosa showed engorged blood vessels and patchy chronic inflammatory cell infiltration. The cysts noted in the mesentery were lined by a single layer of flattened epithelium. The wall of the cyst contained moderate amount of smooth muscle fibers (figure). A diagnosis of ischemia due to torsion resulting from cystic lymphangioma of mesentery was made.

DISCUSSION

Embryologically the lymphatic system develops by the 8th wk of intrauterine life and arises from six primitive sacs; paired jugular sacs lateral to jugular veins, an unpaired retroperitoneal sac at the root of mesentery, an unpaired cisterna chyli dorsal to the aorta and adrenal gland and paired posterior sacs located in relation to sciatic veins [1]. Most authors regard lymphangiomas as malformation that arise from sequestration of lymphatic tissue that fail to communicate normally with the lymphatic system. These remnants accumulate vast amount of fluid accounting for the cystic appearance. Most lymphangiomas become clinically manifest during childhood and develop in areas where the primitive lymph sacs occur. In our case

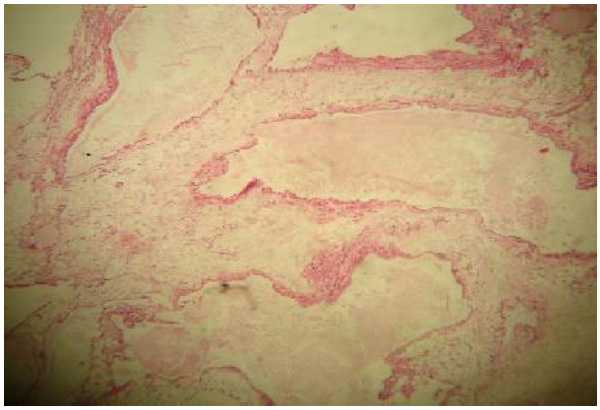

Figure: Cystic lymphangioma. Systic space lined by signal layer of endthetial cells.

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there was association of lymphangioma of mesentery with other congenital abnormality such as myelocele.

The mesenteric lymphangiomas commonly present with acute symptoms, such as acute intestinal obstruction as in this case. This was caused by pressure or rotation of the mesentery leading to torsion of the vessels resulting in infarction of the gut [4]. Ultrasonography is helpful in localizing and determining the cystic nature of the tumours. These appear as well defined cystic masses with multiple septae. Differential diagnosis includes mesenteric cyst, enteric duplication cyst and lymphocele. Histology is the final arbiter of the diagnosis. Out of those lymphangiomas, located below the diaphragm, 63% are left sided. Location wise most intra abdominal lymphangiomas occur in the mesentery of jejunum and ileum as in our case [5]. We conclude that some times rare conditions can mimic acute abdominal symptoms.

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