

Intra-abdominal Lymphangioma: An Unusual Lesion in an Adult Woman

The Editor

Sir,

Lymphangiomas are rare, benign lesions of lymphatics that usually occur in the head and neck region in children (1, 2). An intra-abdominal location is exceptional and the majority of cases occur in early childhood (1–3). The clinical presentation of intra-abdominal lymphangioma (IAL) is diverse, ranging from an incidentally discovered abdominal cyst to symptoms of acute abdomen resulting in emergency laparotomy (1, 2). The correct diagnosis is rarely made pre-operatively as other entities may have similar radiological signs. The diagnosis is confirmed by pathological examination with histochemistry and the treatment is complete surgical excision to prevent recurrence.

A 40-year old nulliparous female with no known chronic illnesses was referred to the University Hospital of the West Indies in June 2005 with a clinical diagnosis of ovarian carcinoma with ascites. She had a two-year history of progressive abdominal swelling and significant weight loss. Physical examination was significant for cachexia and a globally distended abdomen.

An abdominal ultrasound scan revealed a large fluid-filled cystic mass which displaced all intra-abdominal organs. The latter were unremarkable in echopattern. The presumptive diagnosis was either serous cystadenoma or cystadenocarcinoma of the ovary. An intravenous pyelogram and barium enema examinations were normal.

Six weeks after presentation, the patient underwent a staging laparotomy. Operative findings included a large, thick-walled, unilocular cystic lesion occupying the entire peritoneal cavity with displacement and compression of the other intra-abdominal organs (Fig. 1). The cyst contained 18.8L of brown, serous fluid and was densely adherent to the anterior abdominal wall, intestines, great vessels, urinary bladder and liver. The uterus and adnexal structures were not identified. Therefore, partial resection of the cyst wall was performed. The patient had an uneventful postoperative course and at a follow-up visit eighteen months later remained free of symptoms.

Even with the advent of improved imaging techniques, the correct pre-operative diagnosis is not made in a significant proportion of cases of IAL (4). The differential diagnoses include ovarian, pancreatic and retroperitoneal lesions (2, 6–8). Lymphangiomas usually infiltrate adjacent structures and may behave aggressively. Therefore, the

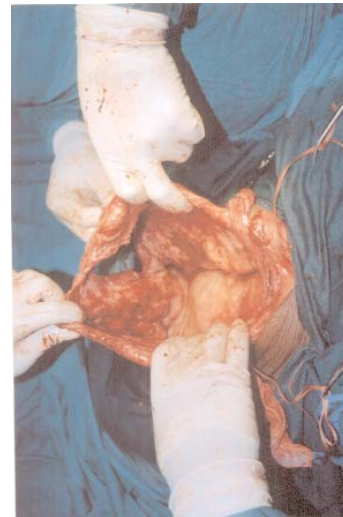


Fig. 1: Intraoperative photograph showing the inside of the cystic mass. The mass has been transected and shows the mass filling the abdominal cavity, displacing and adherent to all the other abdominal organs.

treatment of choice is complete surgical resection (4, 6–9) which may be impossible due to the extent of the lesion.

Microscopically, the cyst was lined by markedly attenuated endothelial cells and was composed of fibrovascular tissue containing densely packed lymphocytic aggregates. Occasionally, intercommunicating thin-walled channels,

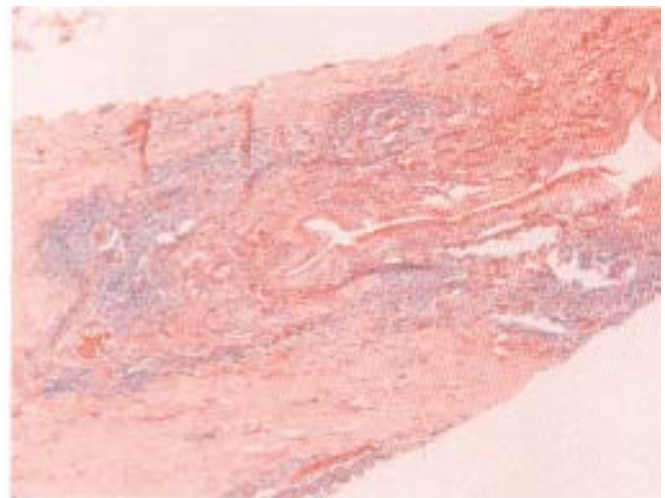


Fig. 2: The microphotograph shows the cyst wall lined by attenuated epithelium and containing intercommunicating thin-walled channels surrounded by dense lymphocytic infiltrates.

positive for smooth muscle fibres and surrounded by dense lymphocytic infiltrates were seen within the wall (Fig. 2). These features were typical of cystic lymphangioma. Peritoneal inclusion cysts, considered to be true cystic mesotheliomas by some authors, may present a diagnostic challenge, which can be resolved by the use of immunohistochemistry for lymphatic, endothelial and mesothelial markers. Florid superimposed reactive and inflammatory changes may mask the true lymphatic nature of lesions (3).

Incomplete excision of IAL can result in recurrence (2, 6, 8, 9) with widely variable rates reported in the literature (9, 10).

From: DH-A Skeete¹, G Char¹, H Fletcher² CS Bolt¹, Departments of Pathology¹ and ²Obstetrics, Gynaecology and Child Health, The University of the West Indies, Kingston 7, Jamaica.

Correspondence: Professor G Char, Department of Pathology, The University of the West Indies, Kingston 7, Jamaica. Fax: (876) 977-1811, e-mail: gurendra.char@uwimona.edu.jm

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