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CLINICAL IMAGING

Spontaneous regression of a cystic retroperitoneal tumour in young women postpartum. Report of two cases

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Abstract

Retroperitoneal cystic tumours are rarely found, and of these, the most common lesion is a cystic lymphangioma. We present two postpartum patients with a cystic retroperitoneal tumour which showed spontaneous regression and a review of the literature.

Keywords: Cystic; Lymphangioma; Retroperitoneal; Post partum; Spontaneous regression

1. Introduction

Retroperitoneal cystic tumours are rarely found, and if so the most common lesion is a cystic lymphangioma. These benign tumours are composed of dilatated lymphatic vessels and considered as a vascular malformation [1]. The majority of cystic lymphangiomas are found in the head and neck region of children [2]. However, they are occasionally seen in adults and found in the abdominal cavity [2,3]. These intra-abdominal cystic lymphangioma are generally classified as mesenteric or retroperitoneal cysts [4]. In this report, two patients with a cystic retroperitoneal tumour which showed spontaneous regression are presented.

2. Case reports

2.1. Case 1

A 22-year-old female patient was referred because of a subhepatic retroperitoneal mass. Her medical history was, except for mild hyperthyroidism, unremarkable and she had never undergone any abdominal operations. Six months prior, she had given birth to a healthy child. Five weeks after delivery she developed an ill-defined abdominal pain without any other gastrointestinal symptoms. At physical examination, no abnormalities were found except for a dull mass within the right upper quadrant of her abdomen. Laboratory results including the CA-125 and the beta-HCG were within normal limits but they did show a slightly increased C-reactive protein of 78 mg/l (normal value <5 mg/l). Blood count and liver function test results were within normal ranges. Ultrasonography of the upper abdomen revealed a complex cystic and solid mass (Fig. 1). Contrast-enhanced computed tomography (CT) scan showed a hypodense cystic mass with irregular enhancing septations (Fig. 2). On T2-weighted magnetic resonance imaging (MRI), high signal intensity cystic mass with septations was seen (Fig. 3). The radiological differential diagnosis included a liposarcoma,

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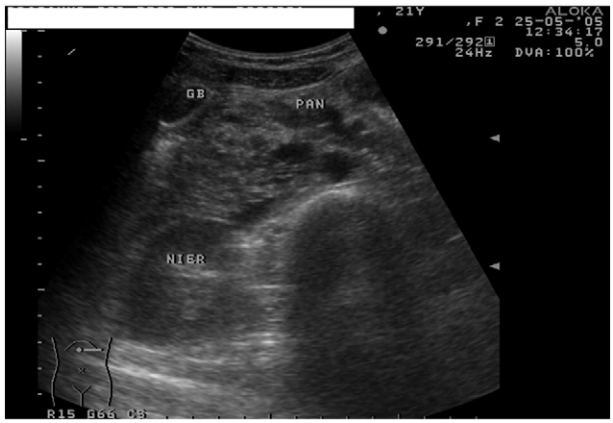

Fig. 1. Ultrasonograph of the upper abdomen of Case 1, which shows a complex mass with cystic and solid components on transverse section of the upper abdomen on grayscale sonography. The mass is located between the GB and NIER on illustration. (On the right site of the kidney, the vertebral column is displayed.) GB—Galbladder. Pan—Pancreas. Nier–Right kidney.

and therefore a laparotomy was performed 1 month after initial presentation. At laparotomy, however, no tumour was found. After medially mobilising the duodenum, the right kidney and retroperitoneal area appeared macroscopically normal. The sole finding was presence of adhesions within the right upper quadrant, which could have been indicative of the previous presence of a tumour. The postoperative course was unremarkable, and 4 weeks after surgery she was doing well without any abdominal complaints.

2.2. Case 2

A 29-year-old female patient presented to the emergency room of our hospital because of abdominal pain and a yellow vaginal secretion. She had given birth to a healthy child 13 days earlier. At presentation, she complained of worsening abdominal pain without other gastrointestinal symptoms. At

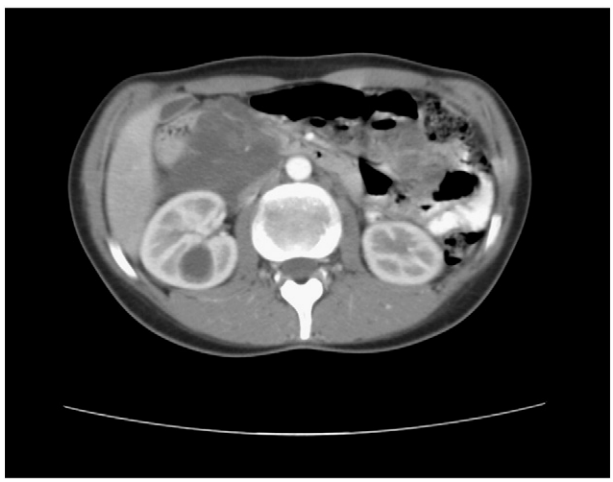

Fig. 2. Contrast-enhanced CT scan of Case 1, which shows a hypodense cystic mass with irregular enhancing septations.

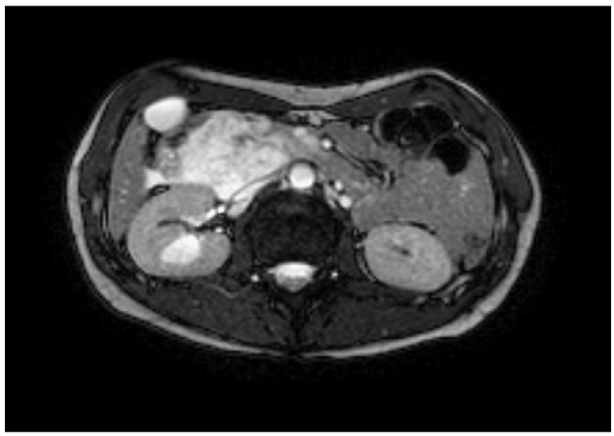

Fig. 3. T2-weighted MR images of Case 1 in which a high signal intensity cystic mass with septations is seen.

physical examination, she had a temperature of 38.4°C. There were normal bowel sounds and a painful palpation of her lower abdomen. At gynecological examination, a yellow, non-smelling vaginal secretion was seen with some pus arising from the cervical ostium. Cultures showed no bacterial growth. At digital vaginal examination, both the uterus and the rectouterine pouch were painful. Laboratory data showed a slightly increased C-reactive protein (47 mg/l), an increased CA 125 of 440 U/ml (normal value <35 E/ml), and an increased CA 19.9 of 7600 E/ml (normal value <37 E/ml). Ultrasonography revealed a multicystic process of 5.9×4.5 cm in the rectouterine pouch, which probably arose from the right ovarium. Because of persisting pain and increase of the CRP level to 103 mg/l the next day, a laparoscopy was performed. Before laparoscopy she underwent curettage. The material obtained showed a nonspecific acute inflammatory process at histopathological examination. At laparoscopy, a normal-appearing uterus, ovaries, and appendix were seen. A retroperitoneal process was found in the left iliac fossa near the sigmoid colon. This tumour was attached to neither the vagina nor the sigmoid colon. Because of the unknown nature of this finding, no attempts were made to take out this lesion. Postoperatively, a MRI was performed: T2-weighted axial (Fig. 4A) and coronal (Fig. 4B) MR images showed a high signal intensity cystic lesion with septations in the lower pelvic region. The radiologist suggested an extra-ovarial ovarian tumour, a pseudocyst, an echinococcus cyst, or a lymphangioma. A wait-and-see policy was initiated and after 8 weeks another MRI was performed. Surprisingly, the cyst was not seen anymore (Fig. 5). The patient had no abdominal complaints and both the CA 125 and CA 19.9 levels were normalised to 10 and 20 E/ml, respectively.

3. Discussion

Retroperitoneal cystic tumours are rarely found, and the most common lesion is a cystic lymphangioma. These