A case of mesenteric teratoma
Published on 25.03.2016

DOI: 10.1594/EURORAD/CASE.13315
ISSN: 1563-4086
Section: Paediatric radiology
Area of Interest: Abdomen
Procedure: Diagnostic procedure
Imaging Technique: CT
Special Focus: Pathology Case Type: Clinical Cases
Authors: AMMOR HICHAM, BOUJARJINJA HAJAR
Patient: 3 months, female

Clinical History:
A three month old infant was brought to the hospital with a hard swelling on the right side of the abdomen since the last 10 to 15 days. On physical examination, there was a hard mass in the central and right side of the abdomen. The mass was slightly mobile in transverse axis of the body.

Imaging Findings:
Abdominal ultrasound showed a large intraperitoneal mass in the right lumbar area extending into the hypochondriac and umbilical region, of mixed echogenicity, mainly solid but contained some cystic areas and calcification.
Abdominal CT showed an intraperitoneal mass containing solid, cystic and fatty elements and foci of calcifications. The small bowel loops were displaced to the left and in an upward direction. Aorta and inferior vena cava were in midline, not displaced.
There was no free fluid in the peritoneal cavity.
A diagnosis of teratoma of the mesentery was made.

Discussion:
Teratomas are tumours originating from pluripotential cells of embryonic vestiges of the ectodermal lines and generally include both cystic and solid elements (hair, teeth, sebaceous elements…) [1].
The common sites of teratomas in children are the sacroccocygeal, mediastinal, retroperitoneal regions and the gonadal organs [2, 3]. The development of extra gonadal, intraperitoneal teratoma in infants and children, particularly those arising from the mesentery and the mesocolon, are very uncommon [3].
The symptoms of teratomas are non-specific, and their size and location of growth may condition clinical manifestations. They can express early if the lesion is situated more peripherally. They present usually with a palpable mass or an increasing abdominal circumference. The mass may also compress the intestines causing constipation or vomiting [4, 5].
Ultrasound is helpful and may aid in the confirmation of the diagnosis but only seldom cases have been reported in which diagnosis was made by ultrasound, preoperatively [6].
CT is the best imaging tool, because the presence of fat and calcifications can provide an accurate imaging diagnosis [7].
At MR imaging, the fatty components are typically hyperintense on T1-weighted images. These hyperintense foci created by fat in the tumours warrant precise diagnosis of teratomas in practically all cases. Chemical shift MRI (depending on differences in resonance frequency between protons in water and those in triglyceride molecules) is also useful in diagnosing teratomas [8].
The pillar of treatment of intra-abdominal teratoma is complete surgical extirpation; it is curative for benign lesions
Mesenteric cystic teratomas are generally benign tumours with very good prognosis after complete excision [11].

**Differential Diagnosis List:** Mesenteric teratoma, cystic lymphangioma, liposarcoma, cystic mesothelioma, duplication cysts

**Final Diagnosis:** Mesenteric teratoma

**References:**


Abdelmounaim Ait Ali, MD et al. (June) Teratoma of the greater omentum. Can J Surg, Vol. 52, No. 3 (PMID: 19503646)


**Figure 1**

**a**

*Description:* Post contrast image showing intraperitoneal mass containing solid, cystic and fatty elements and foci of calcifications. *Origin:* Ammor H, Department of Radiology, Ibn Baja Hospital, Taza, Morocco

**b**

*Description:* Post contrast image showing intraperitoneal mass containing solid, cystic and fatty elements and foci of calcifications. *Origin:* Ammor H, Department of Radiology, Ibn Baja Hospital, Taza, Morocco
Description: Non-enhanced CT: evidence of foci of calcification within the mass. Origin: Ammor H, Department of Radiology, Ibn Baja Hospital, Taza, Morocco
Description: Coronal reformation: the small bowel loops were displaced to the left side.
Origin: Ammor H, Department of Radiology, Ibn Baja Hospital, Taza, Morocco