Giant omental and mesenteric lipoma in an infant

Sir,

Primary tumours of the greater omentum are very rare. Fatty tumours like lipoma are very well depicted on computed tomography (CT) and magnetic resonance imaging (MRI). We present a case of large omental and mesenteric lipoma in an infant which occupied nearly whole of the abdomen. After surgry, a large lipoma weighing about 1.5 kg was obtained. The huge size of the lipoma, occupying the entire abdominal cavity from diaphragm to the pelvis makes it a rare case. The CT findings are discussed in detail.

A 9-month-old child presented with abdominal distension and intermittent diarrhoea of 3 months duration. On clinical examination, a large soft to firm mass was felt extending from the epigastrium to the pelvis. Ultrasound (US) examination of the abdomen (G-50, Siemens, Germany) showed a huge heterogeneously hyperechoic mass lesion occupying the whole abdomen. The lesion was seen to displace the bowel loops towards the periphery. No obvious calcification was seen. Further evaluation was done with contrast enhanced CT scan of the abdomen and pelvis (Espirit, Siemens, Germany). The CT scan revealed a huge fat density (-50 to -100 H) lesion occupying whole of the abdomen extending from just beneath the diaphragm [Figure 1] to the pelvis. The retroperitoneal structures were displaced posteriorly and the bowel loops towards the periphery. Thin fibrous septations were also noted within the lesion. Vessels were noted traversing the lesion. The lesion was compressing and traversing through the spaces between bowel loops rather than infiltrating them [Figure 2]. A diagnosis of mesenteric lipoma was made. Laparotomy was performed which revealed a large yellowish tumour occupying the whole abdomen. The tumour was inseparable from both the omentum and the mesentry. Transverse colon loop was partly engulfed by the tumour and by careful dissection the tumour was removed in toto which weighed 1.5 kg [Figure 3].

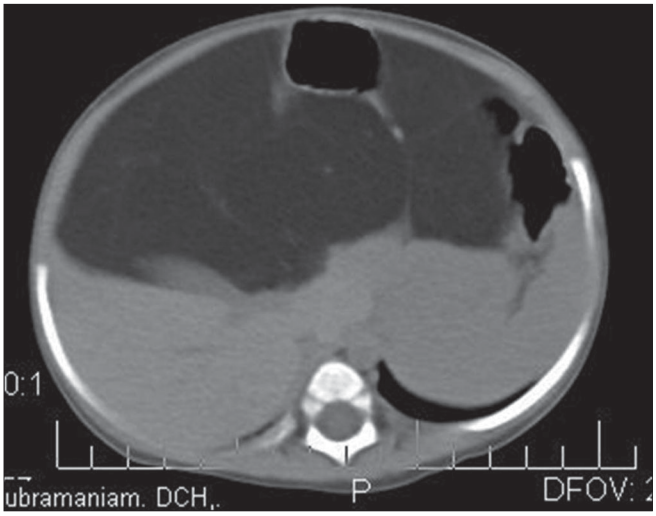


Figure 1: Axial computed tomography scan at the level of the diaphragm showing a large fat density mass lesion in the abdomen displacing the bowel loops towards periphery

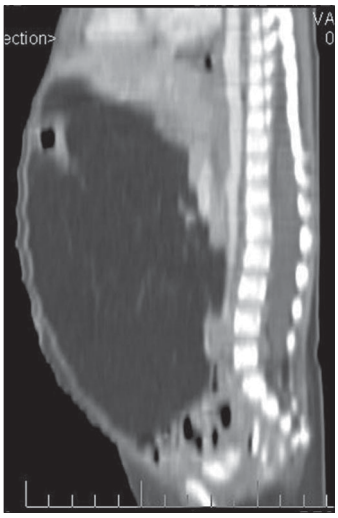


Figure 2: Sagittal multiplanar reconstruction showing the extent of the lesion

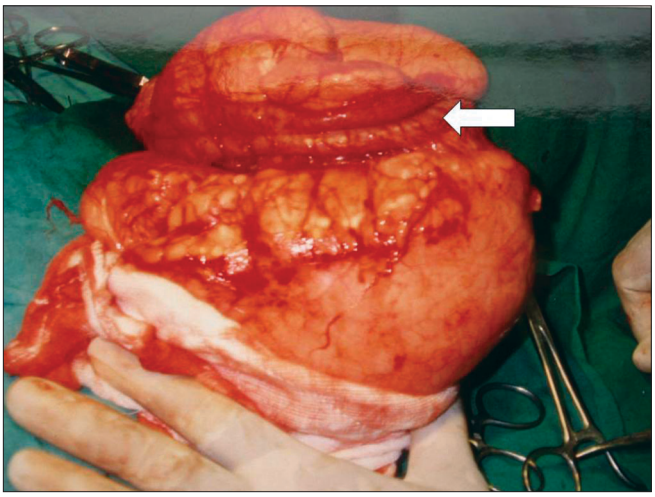


Figure 3: Gross specimen after the surgery. Note the transverse colon loop (Arrow)

Histopathological examination confirmed the diagnosis of lipoma.

Lipoma of the abdominal cavity, a benign neoplasm of mature fat cells usually presents as an asymptomatic abdominal mass or progressive abdominal distension. Lipomas are sometimes detected incidentally as an intraperitoneal radiolucent fat density mass on CT scan.[1]

Lesions with predominantly microscopic fat include adrenal adenoma and some teratomas. Macroscopic fat can be identified with both CT and MRI. Identification of fat with CT is based on the attenuation (less than -20 HU). Several MRI techniques are used for fat suppression like spectroscopic fat saturation and chemical shift (in-phase/opposed-phase) imaging. Lesions with predominantly macroscopic fat include teratoma, myelolipoma, angiomyolipoma, liposarcoma, lipoma, epiploic appendagitis and omental infarction.[2]

In case of omental tumours, CT determines the omental origin of the tumour and also depicts the precise anatomical features, which is very difficult by US. Thus, when US shows an abdominal tumour of unknown origin, CT should be performed for further evaluation keeping the possibility of an omental mass in mind.[3]

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