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IMAGES IN FETAL MEDICINE

Immature Cystic Teratoma Filling the Spinal Column

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A 25-year-old pregnant woman whose baby was detected to have an abdominal mass on obstetric ultrasonography (US) (Fig. 1) was referred for fetal magnetic resonance imaging (MRI) on the 30th gestational age. Fetal MRI revealed a mass lesion located in both abdominal and sacral region, occupying the entire spinal column, except for the cervical region (Fig. 2). Baby was born at 38th gestational age and MRI was performed immediately for detailed assessment of the mass. The solid part of the lesion within the spinal column was isointense compared to brain parenchyma on T1- and T2-weighted MR images. The abdominal component of the lesion was partly cystic. Thoracic, lumbar, and sacral regions of the spinal column were filled and widened by the solid part of the mass (Fig. 3). It died on the second postnatal day and the diagnosis of immature cystic teratoma was established by the histopathological examination.

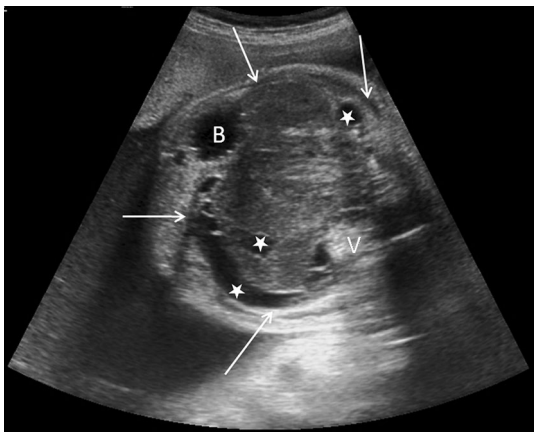

Fig. 1 Axial prenatal sonography image showing a huge mass including solid and cystic components (*asterisks*) filling the abdomen. *B* Bladder, *V* Vertebra

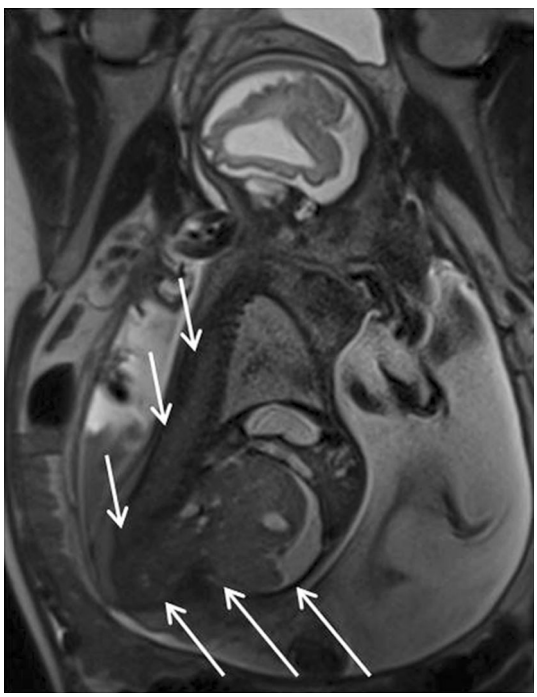

Fig. 2 Fetal MRI revealing a mass lesion located in the abdomen and sacral region, occupying the entire spinal column, except for the cervical region (*arrows*)

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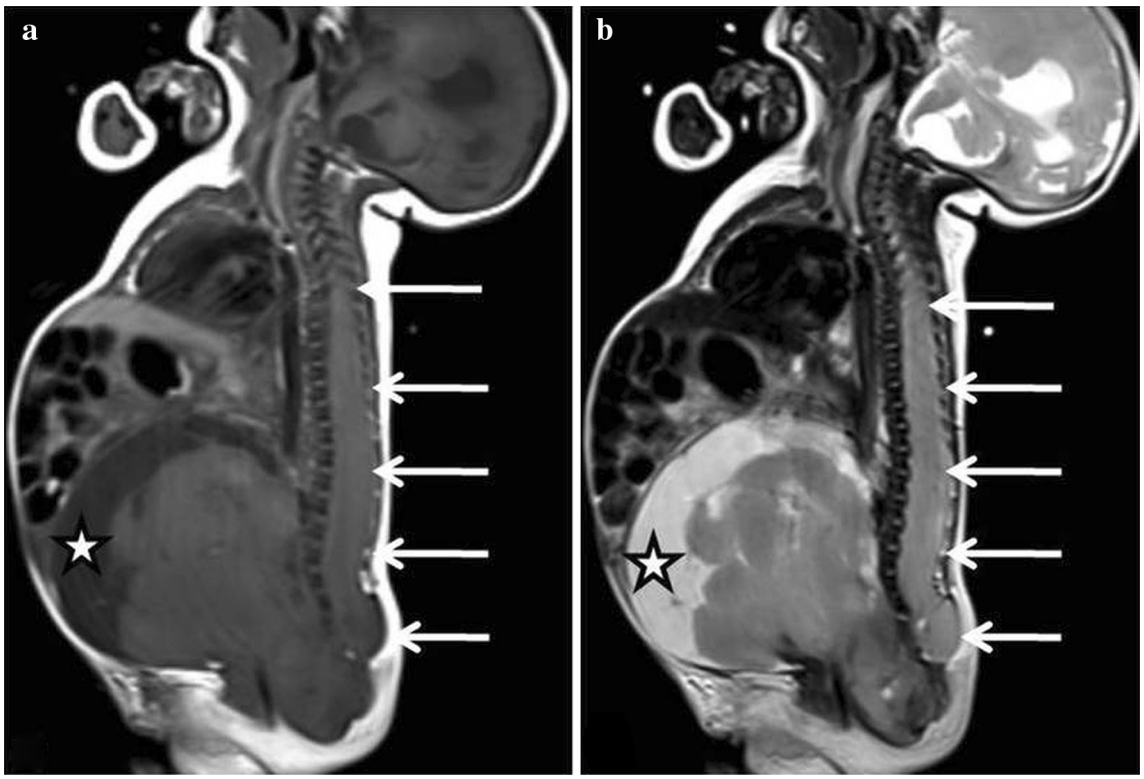

Fig. 3 On T1- (**a**) and T2- (**b**) weighted MR images, the lesion had cystic components in the abdomen (*asterisk*). Note the solid component involving and expanding the thoracic, lumbar, and sacral regions of the spinal column (*arrows*)

Albeit rare, sacrococcygeal teratoma is the most common tumor in the fetal and neonatal period [1, 2]. Histologically, it may be composed of mature, immature (embryonel) or mixed mature and immature elements [2]. Based on imaging findings, a tumor that is predominantly cystic accompanied with the components of fat and calcification reminds mature benign sacrococcygeal teratoma, whereas the predominant solid component which may also not contain fat tissue is suggestive of immaturity and malignancy [3, 4]. In our case, the mass was predominantly solid and we could not detect any area of fat content suggesting an immature sacrococcygeal teratoma. Only a small number of cases are located completely within the pelvis and abdomen without external component and intraspinal extension is extremely rare [1, 2, 5]. Prenatal diagnostic imaging is important particularly in this group of patients who are not presented with external mass visible after birth. Fetal MRI has been reported to be superior to US in evaluating both intraspinal and intrapelvic extent of the tumor [5].

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