Case report of prenatal diagnosis of Fetal left arm tumor (Infantile Myofibromatosis)

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Abstract no

Introduction

The incidence of fetal tumors has been increased due prenatal evaluation and improvement of imaging techniques .US is usually used as the first imaging modality for the detection .Infantile myofibromatosis (IM) is an uncommon soft tissue tumor of infancy characterized by the occurrence of tumors in skin, bones, muscles, and viscera, leading to a broad spectrum of clinical symptoms. They develop from myofibroblasts . Until now 175 cases of Infantile Myofibromatosis have been published in the English literature. The incidence of this lesion is 1 in 150,000 live births

Aim / Objectives

To establish US as the first imaging modality for the detection and differential diagnosis of fetal tumors. We herein report a case of huge tumor on the left forearm diagnosed prenatally and confirmed as Infantile myofibromatosis after birth.

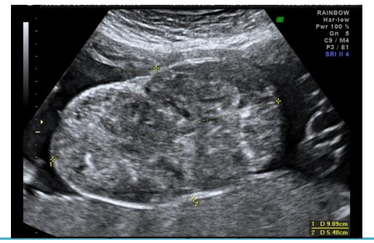
History

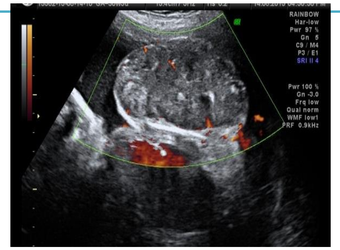
A 27-year-old gravida 2, para 1 woman was referred to our clinic to evaluate a fetal mass at 32 weeks' gestation. Her past medical and obstetric history included an uneventful pregnancy with a cesarean section of a 3200 g female baby .Clinical surveillance of the present pregnancy was unremarkable, and one previous ultrasound examinations at 22 weeks were normal. At 30 weeks, they could see some mass besides the fetus, and send for second opinion and evaluation.

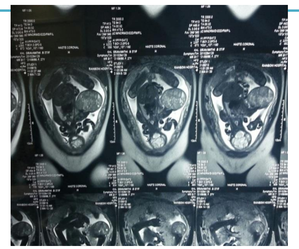
On examination, baby was small for gestational age , amniotic fluid and fetal Doppler's are normal .There was well circumscribed mass measuring 9x5 cm arising from the left arm, just besides the humerus, but the osseous structure was normal. The color Doppler examination showed moderate blood flow in the solid part of the mass.

The differenal diagnosis of tumors of the limbs Hamartoma,Hemangioma, Lymphangioma ,lipoma , fibrosarcoma and sarcoma

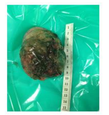
MRI was s/o large heterogenous mass with haemorrhagic foci ? neoplastic mass (?mesenchymal tumor)

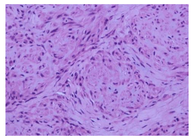


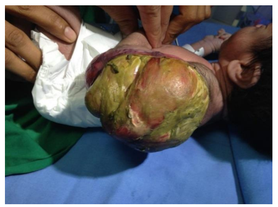


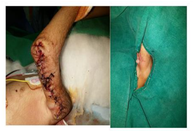


The parents were counseled and a pediatric Surgeons opinion sought Delivery was at 38 weeks by Cesarean section. No resuscitation required.

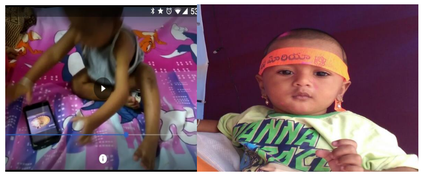








X ray – Homogenous mass sparing bone seemed originating from soft tissue
Biopsy was s/o infantile fibromatosis.Managed with multidesciplinary approach with paediatric surgeon and haemato-oncologist.Resection of tumour done.baby was discharged in fair general condition .At age 1 yr baby I doing fine with no recurrence and normal upper arm function.



Conclusion:

Prenatal evaluation by Ultrasound and Doppler examination complemented by Fetal MRI have improvised the detection and evaluation of Fetal tumors. Multispeciality team approach and counseling plays crucial role in management of these cases. Soft tissue tumors that usually presents in the first few years of life, have a relatively good prognosis and only rarely metastasize Complete surgical resection is the treatment of choice. However, long-term follow-up is recommended as relapse may occur later.

References

Fetal tumors: prenatal ultrasonographic findings and clinical characteristicsJ, Jeong Yeon Cho et al2014 Oct; 33(4): 240–251
Journal of clinical ultrasound –October-2013
Ultrasound Obstet Gynecol 2010; 36: 120–125.