Case Report

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Case Report on Umbilical Cord Haemangioma: A Rare Entity

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Abstract

Many structural abnormalities of the umbilical cord can be identified with the aid of ultrasonography in the antenatal period. The umbilical cord contains two arteries and one vein surrounded by a gelatinous stroma (i.e., Wharton's jelly) and covered by a single layer of amnion. Umbilical cord, allows for the transfer of oxygen and nutrients from the maternal circulation into fetal circulation while simultaneously removing waste products.

Haemangiomas are common benign neoplasms arising from endothelial cells which typically takes place in the skin and soft tissues. Umbilical cord hemangiomas consist of an angiomatous nodule containing and encompassed by edema and myxomatous degeneration of Wharton's jelly, often cystic. Prenatal sonographic differentiation between cord hemangioma and hematoma can be difficult but is possible, Doppler can allow visualization of the vascular architecture within a hemangioma, while a hematoma does not have internal blood flow.

We report a case of, a 20 yr old Primigravida with 37 weeks 5 days pregnancy with intra uterine fetal demise with umbilical cord haemangioma.

Keywords: Umbilical cord haemangioma; Intra uterine fetal demise.

INTRODUCTION

Haemangiomas are common benign neoplasms arising from endothelial cells. They typically take place in the skin and soft tissues. However, they can affect all organs. Several hundred cases of placental haemangiomas are reported in the literature. However, the umbilical cord is extremely unusual as a site of occurrence.[1]

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CASE REPORT

A 20 year old, Primigravida with 37 weeks 5 days pregnancy came with complaints of absent fetal movements since 1 day, with no signs of labour. On her abdomen examination, fetal heart sounds not found and ultrasound was suggestive of intra uterine fetal demise.

Her last menstrual period was on 05.08.2023 with regular menstrual cycles. Her antenatal period was uneventful till 32 weeks of gestation, where her routine ultra sound detected umbilical cord haemangioma, there was a long segment of umbilical cord close to the abdominal wall insertion measuring more than 8 cm. this segment had excess of Wharton's jelly, rest of the cord appeared normal. The umbilical vein is dilated with diameter of more than 9 mm and the dilatation of the umbilical vein appeared to be related to the dilated cord. Placenta appeared to be normal, along with normal Doppler findings. Detailed counselling of patient and relatives was done regarding the condition, and advised weekly follow up. But patient did

not follow up with her visits and reported to the hospital with above said complaints at 37 weeks 5 days.

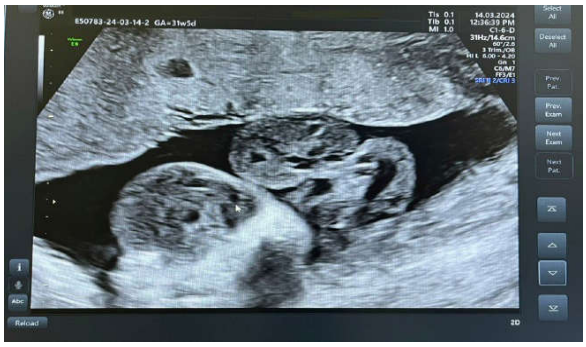

Fig. 1: The above ultrasonographic image shows dilated umbilical cord with excess of Wharton's jelly

After diagnosis of intra uterine fetal demise at 37 weeks 5 days pregnancy, patient was admitted and induction of labour was done by intracervical instillation of cerviprime gel. After 16 hours of labour, she delivered a male child of 2.6 kg uneventfully. Post delivery, the umbilical cord examined showed findings consistent with haemangioma, and placenta was found to be morphologically normal.

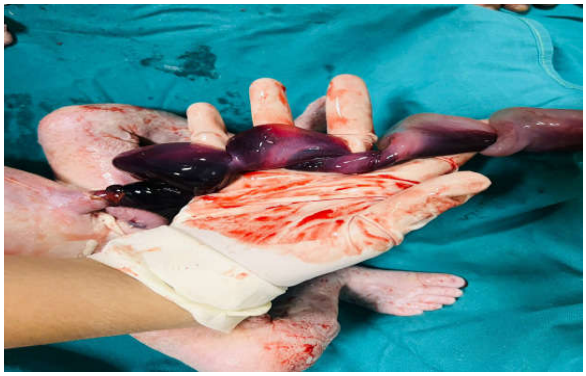

Fig. 2: The above images depicts umbilical cord haemangioma post delivery

Patient had an uneventful post delivery period and was discharged on 2nd post natal day. Histopathology reports were consistent with umbilical cord haemangioma with normal placenta.

DISCUSSION

Haemangioma is rare benign anomaly of umbilical cord arising from allantoic or omphalomesenteric vessels.

It is generally located in distal part of cord, and can be easily misdiagnosed. Thus, careful antenatal evaluation is necessary for early detection which helps in reducing perinatal morbidity and mortality. The differential diagnosis includes umbilical cord teratoma, aneurysm, haematoma and omphalomesenteric duct cyst.

Antenatal diagnosis of umbilical cord haemangioma is confirmed post delivery, by histopathology. In previous studies, elevated alpha feto protein levels are associated with increased risk of umbilical cord haemangioma.[2]

Wharton's jelly area as depicted by prenatal ultrasound correlates with the functional capacity of the placenta and thus merits further evaluation with currently available tests of placental function in clinical practice.[3]

Gross pathology assessment depicts a fusiform-shaped swelling of the umbilical cord engulfed by edema of adjacent Wharton's jelly. This condition carries a high morbidity and mortality rate of approximately 35%, often related to coexisting factors, nonimmune hydrops, polyhydramnios, fetal disseminated intravascular coagulopathy (DIC), fetal growth restriction, additional haemangiomas, other fetal anomalies, and stillbirth. Stillbirth may result secondary to mechanical obstruction of umbilical vessels by the tumour.[3]

CONCLUSION

Umbilical cord haemangioma is a rare entity, which requires close antenatal monitoring, as it is associated with high perinatal morbidity and mortality. In our case, as the patient did not follow up as advised, it resulted in a poor outcome of the fetus.

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