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Case Report

Choriangioma of placenta – A rare case report

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ABSTRACT

Chorioangiomas are benign tumours of the placenta, characterised by AV shunting within placenta leading to fetal anaemia, cardiomegaly and hydrops. Maternal complications are also possible such as polyhydramnios, APH and Mirror syndrome. Chorioangiomas of a large size (>4 cm) can create complications for the fetus and expectant mothers. Chorioangioma is often associated with unfavourable effects on the mother as well as on the fetus. The following article is the case report of a patient who presented with polyhydramnios associated with chorioangioma of placenta with Preterm premature rupture of membranes.

1. Introduction

Chorioangiomas are benign tumors of the placenta, characterised by AV shunting within placenta leading to fetal anemia, cardiomegaly and hydrops.[1] Maternal complications are also associated with polyhydramnios, APH and Mirror syndrome.[2] They are seen after 20 weeks, and most of them remain small and are asymptomatic.[2] Chorioangiomas of a large size (>4 cm) can create complications for the fetus and expectant mothers.[3] The proximity of the chorioangioma to the placental cord insertion site and its size determines prognosis.[2] Chorioangioma is often associated with unfavourable effects on the mother as well as on the fetus.[4] It consists of a benign angioma arising from chorionic tissue.[5] We present a case of Choriangioma with associated polyhydramnios and subsequent PPROM with NICU admission of the baby.

2. Case History

A 24-year-old Primigravida was referred to us at 30 weeks of pregnancy (By Date – query ? By Scan -30.2 Weeks) with PROM with USG suggestive of single live intrauterine gestation of 30.0 weeks with AFI of 14cm, placenta in upper segment anterior position, grade II maturity, with evidence of a hypoechoic lesion measuring 7.6X 5cm towards chorionic plate with hypervascularity. The risk of preterm delivery was explained and steroids were administered. Neonatologists were informed about the case in advance. Patient was given corticosteroid cover in view of prematurity. Patient was induced with dinoprostone gel in view of prolonged rupture of membranes and Patient delivered a female baby of 1.630 kg with placental weight of approximately 500g.

Apgar scores of baby were 8 and 9 at 1 & 5 mins. Baby was admitted in NICU in view of Respiratory distress and prematurity.

Currently baby is vitally and hemodynamically stable and is under observation for weight gain.

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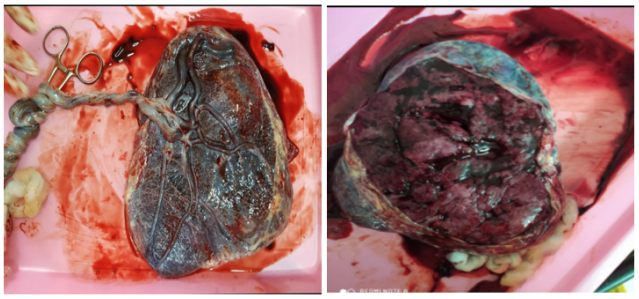

Fig. 1: Gross specimen pictures of placenta

Histopathology of placenta was done, intermingling dilated vessels with areas of coagulation necrosis seen suggestive of chorioangioma.

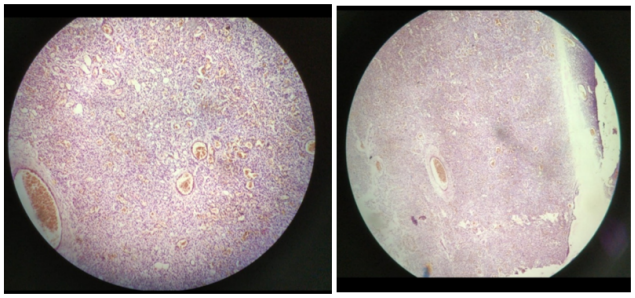

Fig. 2: Histopathology pictures – dilated intermingling vessels

3. Discussion

3.1. Pathology and pathogenesis

Placental chorioangioma is the most common benign tumor of the placenta.[6] They were more seen in multiple pregnancies and in female babies.[7] Chorioangioma is believed to arise by 16th day of fertilization, although there is no documentation of tumor in first trimester.[8] It consists of a benign angioma arising from chorionic tissue. Three histological patterns of chorioangiomas have been described by Marchetti: angiomatous, cellular, and degenerate.[9] The angiomatous is the most common, with numerous small areas of endothelial tissue, capillaries, and blood vessels surrounded by placental stroma.[10] These lesions are sometimes classified as placental hamartomas rather than true neoplasia.

3.2. Clinical features & complications

Chorioangiomas of less than 5 cm are usually asymptomatic and unlikely to cause maternal and fetal complications.[4] Large chorioangiomas act as arteriovenous shunts and cause complications.[9] Maternal complications associated with chorioangiomas are preeclampsia, preterm labour, placental abruption, and polyhydramnios.[11] Of the various reported clinical complications, the correlation of chorioangioma with hydramnios and preterm delivery is significant, latter being a sequelae of the hydramnios.[12] Fetal congestive heart failure may develop because of the increased blood flow through the low resistance vascular channels in the chorioangioma acting as an arteriovenous shunt.[8] Other associated complications are hydrops, hemolytic anemia, congenital anomalies, fetal thrombocytopenia, cardiomegaly, and growth restriction.[11]

3.3. Interventions

Interventions are required for complications arising as a result of chorioangiomas, before fetal viability.[13] Various techniques have been tried such as serial fetal transfusions, fetoscopic laser coagulation of vessels supplying the tumor, chemosclerosis with absolute alcohol and endoscopic surgical devascularization.[13] Polyhydramnios is treated with therapeutic amniocentesis and maternal indomethacin therapy.[14] Steroid administration for acceleration of fetal lung maturity before 34 weeks is indicated.[15] However, our patient came with leaking per vaginum and delivered within 48 hours of admission.

3.4. Differential diagnosis

Placental teratoma, hematoma, Degenerated myoma, partial mole.[4]

4. Conclusion

Chorioangioma warrants institutional care and timely delivery in case of complications as seen in this case. Antenatal diagnosis is by ultrasound, and Doppler would have been the investigation of choice in accurate diagnosis of chorioangioma. Regular followup helps in timely diagnosis and intervention.

5. Source of Funding

None.

6. Conflict of Interest

The authors declare no conflict of interest.

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