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Case Report

Chorioangioma of placenta: a rare placental cause for adverse fetal outcome

Anurag Chaudhary^{1*}, Ruchi Bhandari¹, Arpana Haritwal¹,
Bela Makhija¹, Snehal Makeshwar²

¹Department of Obstetrics and Gynecology, Max Smart Superspecialty Hospital, Saket, New Delhi, India

²Department of Medicine, Kingsway Hospital, Nagpur, India

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*Correspondence:

Dr. Anurag Chaudhary,

E-mail: anumakeshwar74@outlook.com

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ABSTRACT

Chorioangioma is a benign angioma of placenta arising from chorionic tissue. Large chorioangiomas are usually associated with adverse fetal or maternal outcome such as fetal growth restriction, polyhydramnios, fetal anemia, intrauterine fetal distress, intrauterine fetal demise, preterm delivery, premature rupture of membrane and sometimes association with pre-eclampsia in the mother. Here we are reporting a case of 35 years old primigravida who was diagnosed with large chorioangioma of 7.1×4.8×5.0 cm on her 28-32 weeks growth scan with estimated fetal weight of 2.259 kgs. She was having regular antenatal checkups previously. Her previous ultrasounds were reported normal. There were no abnormal findings like fetal growth restriction, polyhydramnios, signs of fetal anemia and all doppler parameters were normal. Usually, large Chorioangiomas are associated with complications. This placental growth seen only at 32 weeks it did not lead to any complications and patient had an uneventful delivery. However large Chorioangiomas require strict monitoring by ultrasound and doppler studies for fetal and maternal well being.

Keywords: Chorioangioma, Benign angioma, Placenta

INTRODUCTION

Chorioangioma a benign vascular placental tumor is the most common tumor of the placenta, with reported incidence of approximately 1.0%.¹ Chorioangiomas were originally described by Clarke in 1978.² Most chorioangiomas are small and are found incidentally at screening obstetric Ultrasound examinations.³

It has no malignant potential and are found on the fetal surface of placenta around the umbilical cord insertion.⁴

These are more seen with multiple pregnancies and in female births. Large chorioangiomas (>5 cm) are usually associated with adverse fetal or maternal outcome such as

FGR, polyhydramnios, fetal anemia, fetal distress, IUFD, preterm delivery, PROM and pre-eclampsia in the mother.⁵ Early diagnosis and close prenatal surveillance and appropriate intervention may prevent severe complications.

CASE REPORT

35 years lady primigravida who had been having regular antenatal checkups including ultrasounds as per scheduled, and all ultrasounds were reported normal. Patient had an uneventful antenatal follow up. She was advised a scan at 28-32 weeks of gestation for fetal growth with well being which showed a large chorioangioma of 7.1×4.8×5.0 cms (Figure 1).

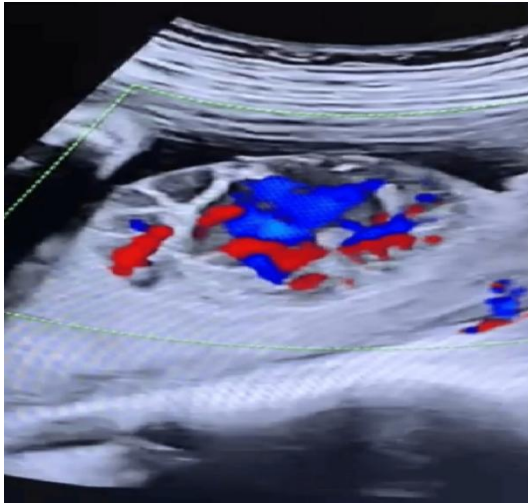


Figure 1: Well defined vascular lesion of 7.1×4.8×5.0 cms in the placenta-placenta chorioangioma showing echogenic large mass with increased blood flow within the tumour.

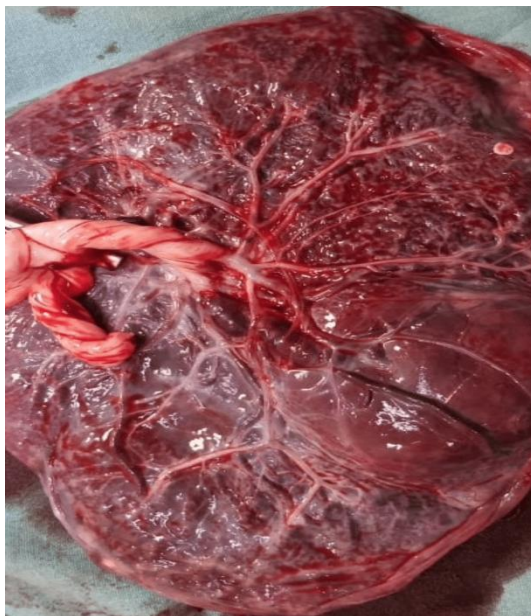


Figure 2: Circumscribed lesion composed of fetal capillaries and surrounding stroma. Areas of fibrosis and calcification-choriocarcinoma.

Patient and her husband were counseled regarding the ultrasound finding and possible fetal and maternal complications were explained to them.

Close monitoring was done to assess any further growth of the chorioangioma with weekly ultrasound and doppler studies. After one week size of chorioangioma had increased to 7.6×5.3×5.5 cms and next ultrasound showed it to be 7.7×5.0×5.1 cms. Patient was given antenatal corticosteroids coverage for fetal lung maturity.

Patient had spontaneous rupture of membranes at 35 weeks 5 days of gestation, induced with misoprostol and

had vaginal delivery with a female child of 2.7 kgs. After delivery, the placenta (Figure 2) was sent for histopathology and report showed features consistent with chorioangioma.

DISCUSSION

Chorioangioma is a rare but a challenging condition. Small tumors are usually monitored with ultrasonography every 6-8 weeks, whereas large tumors require serial ultrasonography examinations every 1-2 weeks.⁵

Color Doppler may be used for differentiating degenerative fibroids, placental teratoma, placental hematoma from placental chorioangiomas by demonstrating the vascularity of the lesion. Large symptomatic chorioangiomas diagnosed before fetal viability requires intervention like serial fetal transfusions, Fetoscopic laser coagulation of vessels supplying the tumor, Chemosclerosis with absolute alcohol and endoscopic surgical devascularization to improve fetal outcome.^{1,6,7}

Polyhydramnios can be managed with therapeutic amniocentesis and maternal indomethacin therapy, while Steroid administration for acceleration of fetal lung maturity before 34 weeks is indicated.^{6,8}

In our case patient had spontaneous rupture of membrane, however apart from that there were no other complications related to large chorioangioma. The lesion was detected incidentally during routine antenatal follow up. Therefore, regular ANC checkups and follow up scans with color doppler are required to know the fetal growth, to diagnose any abnormality related to placenta, tumor size and placental function which can directly affects the growth of the fetus in future.^{1,6}

This case highlights the variable clinical behavior of placenta chorioangiomas, as even large chorioangioma may occasionally remain asymptomatic and result in favorable perinatal outcomes. It also emphasizes the importance of meticulous placental assessment during obstetric ultrasonography and regular follow up. Early recognition and multidisciplinary management can significantly improve maternal and fetal outcomes.^{1,7,9}

Sepulveda et al observed that although giant chorioangiomas carry an increased risk of fetal complications, not all cases develop adverse outcomes, highlighting the heterogeneous clinical course of this condition.⁶ The large clinicopathological series by Guschmann et al further demonstrated that the prognosis depends largely on tumor vascularity and the development of fetal complications rather than tumor size alone.⁹

These observations are consistent with the case discussed here, in which the lesion was detected incidentally during routine antenatal ultrasonography and remained clinically

asymptomatic except for spontaneous rupture of membranes, resulting in a favourable maternal and neonatal outcome following close surveillance.

Furthermore, reporting such uncommon cases contributes to the existing literature and enhances awareness among clinicians regarding cases, management strategies and prognosis of placental chorioangioma.

CONCLUSION

Usually large Chorioangiomas are associated with the above stated complications. In our case report placental growth became obvious only at 32 weeks and it did not produce any complications and patient had an uneventful delivery. However large Chorioangiomas require strict monitoring by ultrasound and doppler to decide if interference is warranted in the form of Amniocentesis, Laser Coagulation or Intrauterine fetal transfusion. This case report shows the importance of regular ANC follow up and ultrasonography so that patient can be diagnosed timely and management can be planned accordingly.

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