International Journal of Environmental Sciences
ISSN: 2229-7359
Vol. 11 No. 23s, 2025
https://theaspd.com/index.php

The Double-Edged Sword: A Rare Case of Placental Chorioangioma

Dr. Abinaya M[1], Dr. Preet Agarwal[2]
[1]Postgraduate, Department of Obstetrics and Gynecology, Sri Ramachandra Medical College and Research Institute
[2]Professor, Department of Obstetrics and Gynecology, Sri Ramachandra Medical College and Research Institute, abithedoc@gmail.com

Abstract
Background: *Placental chorioangiomas are uncommon benign tumors of the placenta that can have severe fetal consequences, especially when large. Complications include polyhydramnios, fetal anemia, and preterm labor.* ***Case Presentation:*** *A 24-year-old G3A2 woman presented at 23+5 weeks of gestation with pain abdomen. Ultrasound revealed a subamniotic hematoma and later, a large placental mass consistent with chorioangioma. Color Doppler demonstrated vascularity from the umbilical cord, with MCA-PSV >1.5 MoM suggestive of fetal anemia. At 32+3 weeks, the baby was delivered via cesarean section due to worsening polyhydramnios and fetal risk. Postnatal course was stable as there was no need for blood transfusion.* ***Conclusion:*** *Early detection, fetal surveillance, and timely delivery are key to improving perinatal outcomes in cases of giant chorioangiomas.*
Keywords:*Placental chorioangioma, polyhydramnios, fetal anemia, preterm birth, perinatal outcome*

INTRODUCTION

Placental chorioangiomas are the most frequent benign tumors of the placenta, with an estimated incidence of 0.2% to 0.6%. Although small tumors are often asymptomatic and incidental findings, large or "giant" chorioangiomas (>5 cm) are associated with adverse fetal outcomes. These include polyhydramnios, fetal anemia, hydrops fetalis and intrauterine fetal demise due to vascular shunting and high-output cardiac failure.
Here, we present a case of a large placental chorioangioma detected antenatally, managed with close fetal monitoring, corticosteroid administration, and preterm cesarean delivery.

Case Report

A 24-year-old woman, gravida 3, abortion 2, presented at 23 weeks and 5 days of gestation with complaints of acute lower abdominal pain. An obstetric ultrasound revealed a subamniotic hematoma measuring 5.4 × 5.3 × 4.2 cm in the right lateral placental wall.
At 24 weeks + 2 days, ultrasound revealed a subchorionic fibrin collection. Follow-up scan at 30 weeks identified a well-defined hypoechoic placental mass on the fetal side measuring 8.6 × 6.2 cm, consistent with chorioangioma.

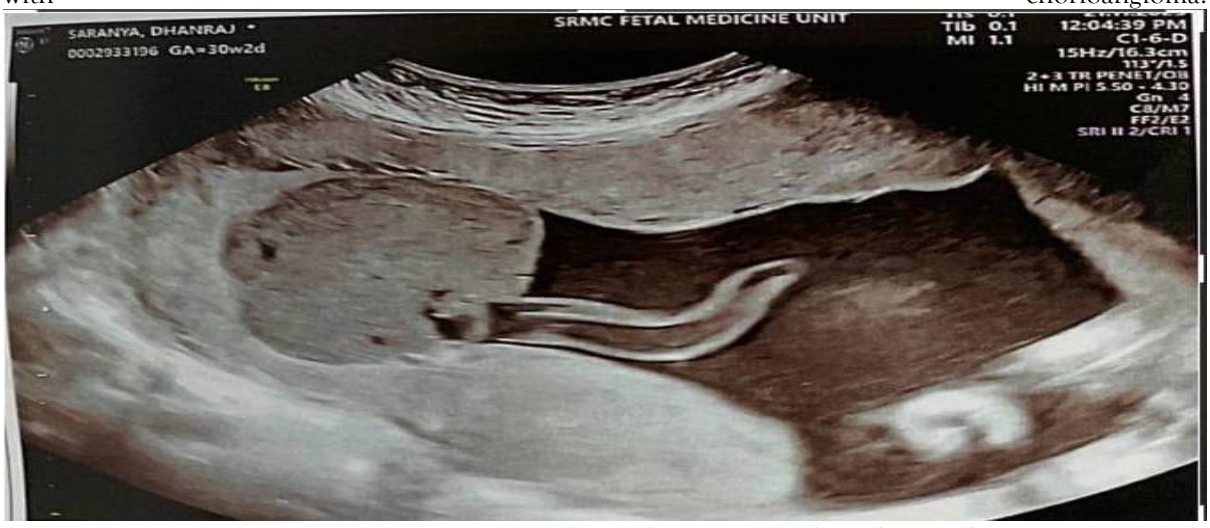

Figure 1: Antenatal ultrasound image showing placental mass arising from fetal surface.
Color Doppler imaging showed vascularity within the mass, with direct blood supply from the umbilical cord. There was a single large feeder vessel with signs of vascular shunting. The amniotic fluid index was

International Journal of Environmental Sciences
ISSN: 2229-7359
Vol. 11 No. 23s, 2025
https://theaspd.com/index.php

raised (polyhydramnios). Middle cerebral artery peak systolic velocity (MCA PSV) was >1.5 MoM, indicating fetal anemia.

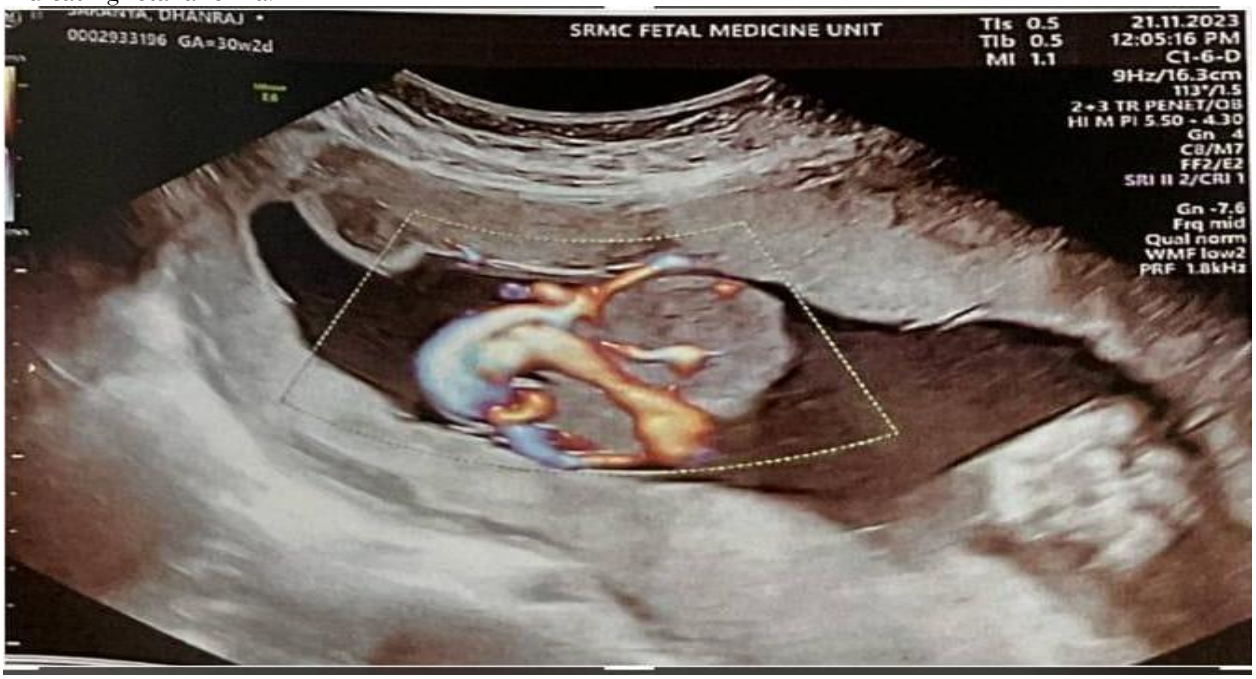

Figure 2: Color Doppler showing vascularity within the chorioangioma with prominent feeder vessel.

After multidisciplinary counseling, antenatal corticosteroids were administered for fetal lung maturity. At 32 weeks + 3 days, in view of worsening polyhydramnios and signs of fetal compromise, the patient underwent elective cesarean section. A breech baby was delivered, not requiring neonatal transfusion. Postnatal hemoglobin stabilized and the baby was discharged in good condition on postoperative day 8. Gross examination of the placenta revealed a large, reddish, encapsulated mass protruding from the fetal side.

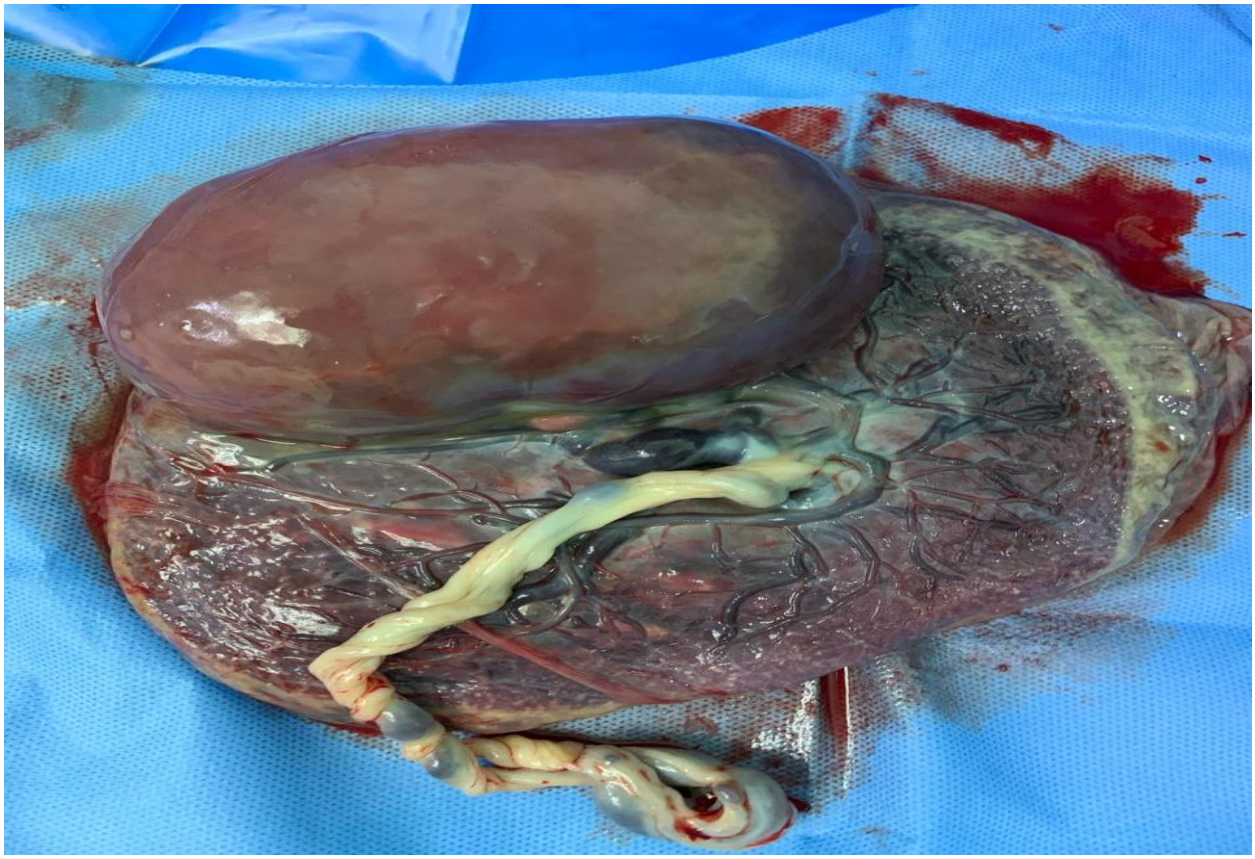

Figure 3: Gross placental specimen showing well-circumscribed vascular mass suggestive of chorioangioma.

DISCUSSION

Chorioangiomas originate from chorionic mesenchyme and consist of blood vessels, stroma, and trophoblasts. While small chorioangiomas are clinically insignificant, large tumors act as arteriovenous shunts, resulting in fetal anemia, hydrops, cardiomegaly, and even fetal demise.

Diagnosis is primarily ultrasonographic. A hypoechoic or complex mass near the umbilical cord insertion site with high vascularity on color Doppler suggests chorioangioma. Elevated MCA PSV serves as a non-invasive marker of fetal anemia.

Management options include:

- Serial monitoring of fetal growth and MCA Dopplers
- Intrauterine transfusion in selected cases
- Interventional options such as laser ablation or alcohol injection (limited availability)
- Preterm delivery in deteriorating cases

In our case, close monitoring and planned early delivery led to a favorable outcome without advanced intrauterine interventions.

CONCLUSION

Giant placental chorioangiomas, though rare, carry significant risk for the fetus. This case emphasizes the role of regular antenatal surveillance, timely diagnosis, and strategic delivery planning to avoid poor perinatal outcomes. A multidisciplinary approach remains key to successful management.

REFERENCES

1. Guschmann M, Henrich W, Entezami M, et al. Chorioangioma of the placenta—new insights into a well-known problem. IJP, 2003.
2. Zalel Y, Weisz B, Gamzu R, et al. Chorioangioma of the placenta: sonographic and Doppler flow characteristics. J Clin Ultrasound.
3. Fox H, Sebire NJ. Pathology of the Placenta. Elsevier, 2011.