A rare case of fetal blood transfusion for anemia caused by a giant placental chorioangioma

Shira Raviv\textsuperscript{1}; Alon Shrim\textsuperscript{1}; Julia Eidel\textsuperscript{1}; Yoav Yinon\textsuperscript{2}; Boaz Weiz\textsuperscript{2}; Shlomo Lipitz\textsuperscript{2}; Motty Hallak\textsuperscript{1}; Rinat Gabbay-Benziv\textsuperscript{1}

\textsuperscript{1}Obsterics and Gynecology Department, Hillel Yaffe Medical Center, Hadera; The Rappaport faculty of Medicine, Technion, Haifa, Israel. \textsuperscript{2}Tel Hashomer Medical Center, Ramat-Gan; Sackler Faculty of Medicine, Tel-Aviv, Israel.

**Background:**
Chorioangiomas (CAs) are the most frequent tumor-like-lesions of the placenta. Giant CAs (> than 4-5 cm in diameter) are rare and may result in severe maternal fetal complications.

**Case presentation:**
A 38-year-old multigravida presented at 31 weeks' gestation with contractions. Upon evaluation, contractions were spontaneously ceased, and the cervix was closed. Ultrasound examination revealed a single viable fetus, polyhydramnios and a 75x48x82 mm vascular lesion located on the placental surface near the cord insertion (Figure 1,2). Doppler assessment was suggestive of fetal anemia with MCA-PSV 1.8 MoM's. Fetal heart rate monitoring and biophysical scores were reassuring. Following betamethasone, fetal cord sampling revealed fetal hemoglobin level of 8.8 gr/dl and 57 cc of blood was transfused resulting in final hemoglobin of 14.3 gr/dl. MCA-PSV normalized immediately after the procedure, however aggravated at the following day with MCA-PSV 65 cm/sec (1.46 MoM's). No other intervention was taken and MCA-PSV continued to fluctuate from slight to severe anemia spontaneously over a period of two weeks. At 34 gestational weeks, the women delivered a healthy baby. Fetal Hemoglobin level at delivery was 21 gr/dl.

**Conclusion:**
Fetal blood transfusion is a reasonable treatment for fetal anemia in cases of giant CA’s. Following transfusion, MCA-PSV may act unexpectedly reflecting various mechanisms affecting the flow.