

[EP07.81] Fetal Magnetic Resonance Imaging for Perinatal Management in Fetal Growth Restriction Associated With Massive Subchorionic Hematoma: A Case Report

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INTRODUCIOTN

Massive subchorionic hematoma (MSH) can cause placental insufficiency and fetal growth restriction (FGR). However, the extent of the hematoma and fetal intracranial lesions may be difficult to evaluate by ultrasound alone. We report a case in which fetal magnetic resonance imaging (MRI) guided perinatal management.

CASE: INITIAL PRESENTATION

Patient Profile:

- 36-year-old woman(G2P1)
reffered at GA 25+1 weeks for FGR

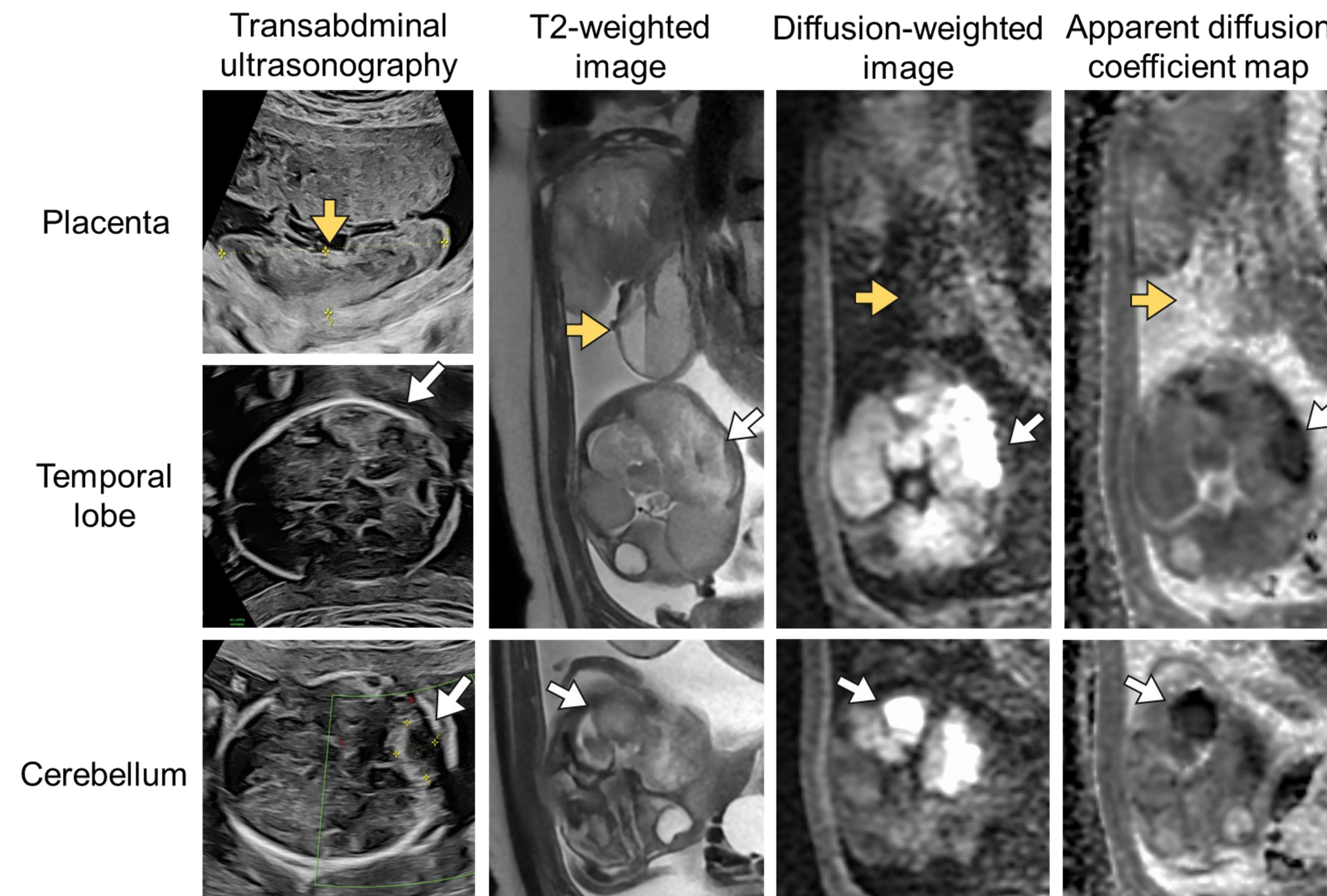
Ultrasound Findings:

- Severe growth restriction
estimated fetal weight 291 g, -4.4 SD
- Oligohydramnios
- Hypoechoic lesion was detected in the left cerebellar hemisphere
- Placental hematoma

Doppler Examination:

- Reversed end-diastolic flow in the umbilical artery
- Reversed a-wave in the ductus venosus

IMAGING MODALITIES



Fetal ultrasound and magnetic resonance images.
Yellow arrows: placental hematoma.
White arrows: fetal intracranial lesions.

ADVANCED IMAGING & OUTCOME

Fetal MRI Findings(GA 25+4 weeks):

- MSH
- cerebellar hematoma
- hemorrhagic infarction extending from the left temporal to occipital lobe

Clinical Management Timeline:

- Counseling: Family informed of poor neonatal prognosis; neonatal resuscitation not planned
- GA 26+3 weeks;
Intrauterine fetal death(IUFD) occurred
- GA 27+2 weeks;
Labor induced; vaginal delivery (Birth weight: 385g)

Placental Pathology:

- hypoplastic placenta (<3rd percentile)
with a hematoma and intervillous fibrin deposition

CONCLUSION

Fetal MRI demonstrated both the MSH and extensive fetal hemorrhagic cerebral infarction, providing critical information for perinatal management. Fetal MRI may represent an important adjunctive modality in the evaluation of FGR.