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Fulminant Early-Onset HELLP Syndrome at Extreme Prematurity: A case study

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Background

HELLP syndrome is a severe manifestation of pre-eclampsia associated with significant maternal and perinatal morbidity[1,2]. Early-onset disease at extreme prematurity is uncommon and may deteriorate rapidly despite initially reassuring clinical and laboratory findings[2,3]. Early fetal growth restriction (FGR) is frequently associated with placental dysfunction and increased maternal risk[3,4].

Aims

To describe rapid progression to severe HELLP syndrome following apparent clinical stabilisation and highlight key indicators prompting urgent escalation.

Case

A 30-year-old G5P4 woman at 25+5 weeks' gestation presented with severe hypertension (198/115 mmHg), proteinuria, and persistent headache without prior hypertensive disease. Ultrasound demonstrated early FGR (estimated fetal weight 3rd centile). Initial investigations were reassuring, including platelets of 153 $\times 10^9$/L. Following antihypertensive therapy, blood pressure normalised and the patient appeared clinically stable.

Within hours, she developed acute epigastric pain, hyperreflexia with clonus, and recurrent severe hypertension. Platelets rapidly declined to 68 $\times 10^9$/L within 12 hours with rising transaminases and heavy proteinuria with protein-creatine ratio of 1300, confirming severe HELLP syndrome. Magnesium sulphate and antenatal corticosteroids were administered, and urgent tertiary transfer arranged. Emergency classical caesarean section was performed at 25+6 weeks.

Results

Maternal biochemical parameters improved postoperatively. The neonate was admitted to NICU for ongoing care related to extreme prematurity.

Discussion

This case highlights the unpredictable and fulminant evolution of HELLP syndrome and emphasises the importance of clinical vigilance despite initially reassuring investigations Rapid platelet decline and neurological signs may precede laboratory confirmation. Early FGR should prompt heightened surveillance, and timely multidisciplinary escalation is essential to optimise maternal outcomes.

References

1.American College of Obstetricians and Gynecologists. Gestational hypertension and preeclampsia. *ACOG Practice Bulletin No. 222*. Obstet Gynecol. 2020;135(6):e237–e260.
2.Sibai BM. Diagnosis, controversies, and management of the syndrome of hemolysis, elevated liver enzymes, and low platelet count. *Obstet Gynecol*. 2004;103(5 Pt 1):981–991.
3.Mol BWJ, et al. Pre-eclampsia. *Lancet*. 2016;387(10022):999–1011.
4. Society of Obstetric Medicine of Australia and New Zealand. Guideline for the management of hypertensive disorders of pregnancy. 2023.