

Gitelman's Syndrome in a Pregnancy with HELLP Syndrome – Association or Coincidence?

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Background

Gitelman's syndrome (GS) is a rare autosomal recessive kidney disorder. It is a salt-losing tubulopathy that is characterised by hypokalaemic metabolic alkalosis, hypomagnesemia and hypocalciuria. GS in pregnancy has been associated with oligohydramnios and intrauterine growth restriction^{1,2}. There is minimal literature reporting association with gestational hypertensive disorders.

Profile

A 33-year-old primigravida was referred to our antenatal services at 17 weeks gestation. She was known to the Renal Department for Gitelman's syndrome, managed with oral potassium and magnesium replacement.

Case Presentation

- Our patient was high risk for pre-eclampsia and on prophylactic aspirin. Her baseline BP 105/60
- Ultrasound scans showed a normal growth and well-being until 28 weeks where she developed asymmetrical IUGR with normal dopplers
- At 30 weeks she developed mildly deranged LFTs (ALT 66, AST 38) and borderline thrombocytopenia (Plt 147).
- By 32 weeks, scans had normalised. Her magnesium supplementation required uptitrating as levels remained low (0.6)
- At 34 weeks, she developed her first episode of hypertension at 150/90. On examination she had 2 beats of clonus bilaterally and nil other findings. She was commenced on 200mg labetalol BD.
- At 35 weeks, her LFTs became severely deranged with ALT 2126 AST 1121. Platelet count normalised.
- Given her severe LFT derangement, she was admitted and delivered by Caesarean section that day. Baby weighed 1853g (<1%).
- She recovered well post-partum. LFTs normalised within 2 weeks.

Discussion

We propose two hypotheses for the development of HELLP syndrome in our patient.

1. Involvement of hypomagnesemia^{3,4}
2. Secondary hyperaldosteronism^{5,6}

These are only hypothesis. Perhaps the GS and the HELLP Syndrome are two separate pathologies and should be treated dualistically. This case begs the question as to whether the GS and HELLP in our patient was an association or only a coincidence?

References

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