Predictors of neonatal morbidity in pregnancies with antenatal HELLP (haemolysis, elevated liver enzymes, low platelets) syndrome

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Objective

To evaluate clinical parameters at presentation of antenatal HELLP (haemolysis, elevated liver enzymes, low platelets) syndrome for the subsequent neonatal adverse outcome.

Methods

Antenatal diagnoses of HELLP syndrome (n=94) were included over a 5-year period. Maternal characteristics and laboratory data at presentation including parity, gestational age, blood pressure, hematocrit, leukocyte count, platelet values, serum alanine and aspartate aminotransferases, and proteinuria were retrieved. A logistic regression model with backward elimination was constructed to predict composite neonatal morbidity (sepsis, requirement for antibiotherapy, convulsions, intracranial haemorrhage, hypoglycaemia, hypocalcaemia, hyperbilirubinemia, meconium aspiration syndrome, and respiratory distress syndrome).

Results

There was no neonatal mortality. Overall, 53. 2% (n=50) of the infants had suffered some morbidity. Gestational age at presentation was the only independent predictor among included variables to predict composite neonatal adverse outcome (B=-0. 285, p=0. 001).

Conclusion

In pregnancies presenting with antenatal HELLP syndrome, maternal and laboratory parameters at presentation are not prognostic for subsequent neonatal morbidity. Early-onset disease seems to be the sole and strongest predictor of neonatal complications.