

NEURODEVELOPMENT

Prognostic value of general movements (GM) in late preterm infants

Background

Although late-preterm infants are believed to be comparable to term infants in terms of morbidity and mortality, adverse cognitive and behavioral outcomes are increased in these patients. Thus, prediction of developmental disorders is of great interest. The predictive value of GM in late-preterm infants is unknown. Claudia Brogna and coworkers aimed to answer this question.

Summary of results

574 infants were included in the study. GM were assessed from video recordings at 1 and 3 months corrected age (CA). Neuromotor outcome was evaluated at 24 months using Touwen's criteria and Bayley scale. A significant correlation was found between GMs and outcome both at 1 and 3 months CA. The assessments showed 100% sensitivity and 86% (1 month) / 97% (3 months) specificity of predicting cerebral palsy (CP).

Strength

This is the first study to investigate the quality of GMs and their predictive power in a large group of late-preterm infants.

Limitations

A rather high rate of abnormal GM and percentage of CP (4%) in the study cohort is discussed to be justified by the elevated number of high-risk patients (including SGA infants affected by RDS or sepsis), while literature-reported data refer to populations of low-risk-late-preterm infants.

Practical conclusion

The authors conclude, that qualitative assessment of GMs should be employed to help identify late-preterm infants who require early intervention for neurological abnormalities.

Brogna C, Romeo DM, Cervesi C, Scrofani L, Romeo MG, Mercuri E, Guzzetta A. Prognostic value of the qualitative assessments of general movements in late-preterm infants, *Early Human Development*, Volume 89, Issue 12, December 2013, Pages 1063-1066

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