

Screening tests to prompt referral for diagnostic assessment of cerebral palsy in low-risk infants

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Boychuck et al. are to be commended for soliciting feedback from an international panel of experts in early identification of cerebral palsy (CP), via a Delphi survey, to [establish recommendations for referral for diagnostic assessment in low-risk infants with possible CP](#).¹ Amongst those experts, agreement was high for inclusion of six clinical features that should lead to referral by primary care providers for the more than 50% of infants later diagnosed with CP but who were born at term and not routinely included in specialist, high-risk follow-up programs: (1) demonstrated hand preference before 12 months of age; (2) stiffness or tightness in the legs between 6 and 12 months of age; (3) persistent hand fisting after 4 months of age; (4) persistent head lag after 4 months of age; (5) inability to sit without support after 9 months of age; and (6) consistent asymmetry in posture and movements after 4 months of age.¹

In examining those six clinical features, I was struck by their similarity to a tool developed and designed for use *by* primary care providers (e.g., general practitioners, family physicians, community health nurses) and others to screen infants for developmental delay. The Harris Infant Neuromotor Test (HINT) is a norm-referenced,

reliable and valid screening tool that can be used in both clinical and research settings for infants aged 2.5 to 12.5 months with an administration and scoring time of 15 to 25 minutes.²

Of the six clinical features recommended by the expert panel, the only one *not* included in the HINT is the fourth: persistent head lag after 4 months. That item was excluded because earlier research on the Movement Assessment of Infants, a precursor to development of the HINT, showed that it failed to differentiate between 4-month-old infants born preterm who were subsequently diagnosed with CP and those who were developing typically at 3 to 8 years of age.³

Another tool that includes five of the six clinical features to lead to diagnostic referral per Boychuck et al.¹ is the Hammersmith Infant Neurological Examination (HINE), known formerly as the Dubowitz exam, and designed to assess infants aged 2 to 24 months.⁴ The only recommended clinical feature omitted in the HINE is hand preference. Like the HINT, the HINE has strong reliability and validity; it can be administered and scored in 10 to 15 minutes.

Because both tests can be used with low- or high-risk infants, either the HINT or the HINE could be used in primary care settings to aid in referral of low-risk (term) infants for further diagnostic assessment of possible CP, as suggested by Boychuck et al. based on recommendations from the international expert panel.¹

REFERENCES

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