EARLY DIAGNOSIS – CEREBRAL PALSY

Hammersmith Infant Neurological Examination (HINE)

CLINICAL FACT SHEET

How long does the HINE take?

The examination takes 10–15 minutes to perform.

STANDARDISED NEURO EXAM

Do I need certified training to use the HINE in clinical practice?

No you do not need certified training to use the HINE in clinical practice.

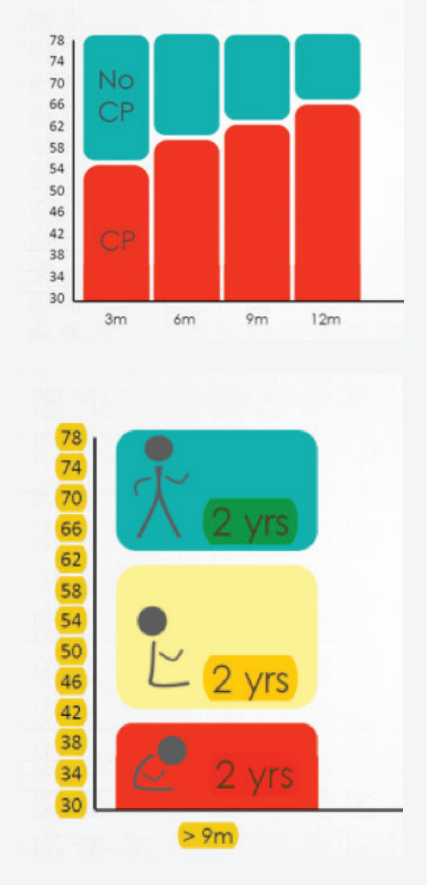
HINE is predictive of cerebral palsy

HINE scores at 3 months:

- <57 is 96% predictive of cerebral palsy
- <40 never occurs in children with normal outcomes[1,4]

HINE scores at (6, 9, 12 months):

- 90% predictive of cerebral palsy
- <73 predictive of cerebral palsy
- <40 almost always indicates cerebral palsy[3,4]



HINE is predictive of severity and topography of cerebral palsy

- Motor severity of cerebral palsy under years of age is most accurately predicted using the HINE

HINE scores at 3, 6, 9 or 12 months:

- 50-73 indicates likely unilateral cerebral palsy (i.e. 95-99% will walk)
- <50 indicates likely bilateral cerebral palsy

HINE scores at 3-6 months:

- 40-60 indicates likely GMFCS I-II
- <40 indicates likely GMFCS III-V

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2. Pizzardi A, Romeo DM, Cioni M, Romeo MG, Guzzetta A. Infant neurological examination from 3 to 12 months: predictive value of the single items. *Neuropediatrics* 2008; 39: 344-6.
3. Romeo DM, Ricci D, Brogna C, Mecuri E. Use of the Hammersmith Infant Neurological Examination in infants with cerebral palsy: a critical review of the literature. *Dev Med Child Neurol* 2015. doi:10.1111/dmcn.12876.
4. Romeo DM, Cioni M, Palermo F, Cilauro S, Romeo MG. Neurological assessment in infants discharged from a neonatal intensive care unit. *Eur J Paediatr Neurol* 2013; 17: 192-8.
5. Haataja L, Mercuri E, Regev R, Cowan F, Rutherford M, Dubowitz V, et al. Optimality score for the neurologic examination of the infant at 12 and 18 months of age. *J Pediatr* 1999; 135: 153-61.
6. N.L. Maitre, O. Chorna, D.M. Romeo, A. GuzzettaImplementation of the Hammersmith Infant Neurological Examination in a high-risk infant follow-up program. *Pediatr Neurol* 2016: 65: 31-38.

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