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Letter to the Editor

Early intervention: The challenge to find the best approach for infant and family

Dear Editor,

Wallen, Imms, Hoare and Greaves (2017) excellently discussed the systematic reviews on early intervention in infants at very high risk (VHR) of cerebral palsy (CP). The authors stressed that the evidence on the effectiveness of early intervention in VHR infants is weak. This situation differs considerably from that of infants at moderately high risk of CP, such as infants born preterm without a serious brain lesion. In the latter group ample evidence is available that developmental stimulation and parental support are associated with improved motor, cognitive and family outcome (Benzies, Magill-Evans, Hayden & Ballantyne, 2013; Spittle, Orton, Anderson, Boyd & Doyle, 2015). The two reviews suggested that also in VHR infants developmental stimulation and parental support are key components of intervention. In addition, Hadders-Algra *et al.* suggested that in VHR infants the addition of some postural support hands-on assistance may be beneficial, a suggestion that differs from the recommended intervention in at-risk infants who do *not* develop CP: evidence suggests that hands-on techniques of NeuroDevelopmental Treatment in this group is counterproductive (Blauw-Hospers, Dirks, Hulshof, Bos & Hadders-Algra, 2011). This suggests that VHR infants deserve early intervention that is not only tailored to family characteristics, but also to the infant's risk profile: if neuroimaging and clinical assessments suggest 'very high risk', the combined approach of developmental stimulation, parental support and some hands-on postural support might be associated with best outcome of infant and family, but as soon as clinical markers suggest 'presumably no CP', hands-on techniques should be omitted.

This implies that early intervention is challenging. Equally challenging is early detection of infants at VHR of CP. In industrialised countries, early detection has become remarkably successful in infants who have been admitted to neonatal intensive care units. However, for the majority of infants worldwide, diagnostic facilities are less advantageous.

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References

- Benzies, K. M., Magill-Evans, J. E., Hayden, K. A. & Ballantyne, M. (2013). Key components of early intervention programs for preterm infants and their parents: a systematic review and meta-analysis. *BMC Pregnancy and Childbirth*, 13 (Suppl. 1), S10.
- Blauw-Hospers, C. H., Dirks, T., Hulshof, L. J., Bos, A. F. & Hadders-Algra, M. (2011). Pediatric physical therapy in infancy: From nightmare to dream? A two-arm randomized trial. *Physical Therapy*, 91 (9), 1323–1338.
- Spittle, A., Orton, J., Anderson, P. J., Boyd, R. & Doyle, L. W. (2015). Early developmental intervention programmes provided post hospital discharge to prevent motor and cognitive impairment in preterm infants. *Cochrane Database Systematic Reviews*, 11: CD005495. doi:10.1002/14651858.CD005495.pub4
- Wallen, M., Imms, C., Hoare, B. & Greaves, S. (2017). Weak evidence supports intensive, task oriented, early intervention with parent support for infants with, or at high risk of, cerebral palsy. *Australian Occupational Therapy Journal*, 64 (5), 424–426.