

NEUROMOTOR, COGNITIVE AND BEHAVIOURAL OUTCOME IN THE OFFSPRING

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In European countries, 1-4% of children are born following assisted reproductive technology (ART) and it is likely that this percentage will rise further. Consequently, health and development of ART-children becomes of increasing general importance. The body of evidence concerning neurodevelopmental outcome (including neuromotor development, cognition, speech/language and behaviour) of ART-children is limited. Follow-up studies of high methodological quality are scarce, therefore attention should be paid to study design, attrition, blinding of the assessors, validity of the neurodevelopmental tests used, confounders included in the analyses and group size or power analysis. Qualitative good register-based studies suggest that IVF/ICSI *per se* does not increase the risk for severe cognitive impairment (i.e. mental retardation) or neuromotor handicaps such as cerebral palsy (CP), the association of IVF/ICSI and CP being brought about by the association of assisted conception with risk factors, like preterm birth. In general, controlled studies of good quality do not report an excess of neurodevelopmental disorders in IVF/ICSI-children. However, the majority of studies follow children during infancy only, thereby precluding pertinent conclusions on the risk of neurodevelopmental disorders that come to the expression at older ages, such as fine manipulative disability or dyslexia. Therefore, further research of high methodological quality in children beyond pre-school age is still needed.