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Impact of Cuevas Medek Exercise in Neuromotor Disorders: A Review

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ABSTRACT

Cuevas Medek Exercises (CME) are a paediatric physiotherapy approach designed to improve motor skills in children with developmental challenges. These exercises involve dynamic movements manually guided to encourage active participation and minimise passive handling. It focusses on stimulating neuroplasticity, helping the brain reorganise and form new neural connections, by progressively challenging the child. CME shifts the focus of paediatric rehabilitation from passive techniques to active engagement, enhancing motor function development in a more engaging and effective manner. The objective of the study is to determine the application and efficacy of CME in children with diverse conditions. The literature search was done using the Cochrane Library and PubMed including recent studies from 2012 to 2024. A total of 12 articles were reviewed from which four to five articles were found relative according to the inclusion criteria of the study. CME therapy has shown the potential in treating children with developmental disabilities resulting from conditions such as cerebral palsy, hypotonia, or motor delays due to non degenerative diseases. Recent research studies have demonstrated the effectiveness of CME in addressing conditions like corpus callosum abnormalities, congenital heart disease, congenital hydrocephalus, autism spectrum disorder, and cerebral palsy. In conclusion, CME therapy holds potential for treating motor delays in children with non degenerative diseases or neurological genetic conditions like cerebral palsy and autism. However, its application may be limited by factors such as the child's height and weight, as therapists need sufficient muscular strength to perform the exercises. Given the lack of extensive empirical research, further studies are necessary to validate the therapy's effectiveness and determine its broader applicability.

Keywords: autism spectrum disorder, cerebral palsy, corpus callosum, developmental disabilities, hydrocephalus