

PEARLS Practical Evidence About Real Life Situations

Pronation may be more effective than supination in correcting pulled elbow

Clinical question	How effective is manual reduction in pronation (palm facing downwards) and supination (palm facing upwards) in correcting pulled elbow (radial head subluxation) in young children (younger than 7 years)?
Bottom line	There was limited evidence pronation might be more effective and less painful than supination. However, only a small difference in effectiveness was found. Pain perception was reported by 2 trials but data were unavailable for pooling. Both studies concluded the pronation technique was less painful than the supination technique.
Caveat	The methodological quality of all 3 trials was low because of incomplete reporting and high risk of bias resulting from lack of assessor blinding.
Context	Pulled elbow is a partial dislocation of the radial head at the elbow joint in a young child, usually caused by an adult or taller person suddenly pulling or tugging on the childÕs arm when it is straight; or when a child pulls away from an adult impulsively. The child immediately complains of pain and cannot use their arm. Many textbooks recommend supination as the preferred method in correcting pulled elbow, which is not supported by the findings of this systematic review.
Cochrane Systematic Review	Krul M et al. Manipulative interventions for reducing pulled elbow in young children. Cochrane Reviews 2009, Issue 4. Article No. CD007759. DOI: 10.1002/14651858.CD007759.pub2. This review contains 3 studies involving 313 participants.
PEARLS No. 226, January 2010, written by Brian R McAvoy.	

[References]



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