

Only three research studies published

Macias-Merlo et al, 2015, a&b

Very small numbers and no control group means we don't know if results can be applied to all children with CP.



Lack of base line measures, randomisation, small study numbers and selection bias in study and control groups.



Link between hip flexibility and hip stability cannot be made



Impact of mobility on hip was not taken into account



Children in study group maintained hip integrity and symmetry but this cannot be wholly attributed to abducted standing.

Impact of mobility on hip was not taken into account



Martinsson & Himmelmann, 2011

Lack of controlled variables between study and control groups, and lack of recording of dosage and duration means reliable conclusions cannot be drawn.

Study Groups

Control Groups



Surgery & Abducted Standing



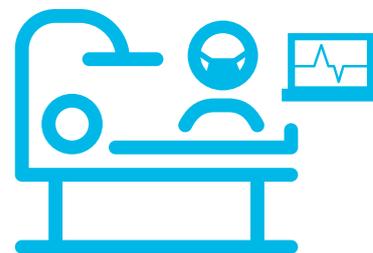
Abducted Standing Alone



Surgery & Regular Standing



Regular Standing Alone



Surgery may have been the most important and predictive factor for MP improvement.

What can we learn?

Hip surveillance and preventative or corrective surgical intervention can maintain hip integrity



Abducted standing may have a role in the development of hip integrity for children with CP

Children are likely to benefit from standing after hip surgery



An individualised approach for each child should be used, based on clinical expertise

*Note

The infographic should be used in conjunction with the report "What is the evidence for the effect of hip abduction in standing on hip integrity in children with cerebral palsy?"

www.leckey.com/know-how/

References:

Macias-Merlo, L., Bagur-Calafat, C., & Girabent-Farres, M., 2015a. Standing programs to promote hip flexibility in children with spastic diplegic cerebral palsy. *Pediatric Physical Therapy*, Volume 27, pp. 243-249.

Macias-Merlo, L., Bagur-Calafat, C., & Girabent-Farres, M., & Stuber, W., 2015b. Effects of the standing program with hip abduction on hip acetabular development in children with spastic diplegia cerebral palsy. *Disability and Rehabilitation* DOI:10.3109/09638288.2015.1100221

Martinsson, C. & Himmelmann, K., 2011. Effect of weight-bearing in abduction and extension on hip stability in children with cerebral palsy. *Pediatric Physical Therapy*, Volume 23, pp. 150-157.