Postural management for children with cerebral palsy: consensus statement

A Mac Keith Multidisciplinary Meeting formulated the following consensus statement concerning postural management for children with cerebral palsy (CP) based on evidence from clinical experience and scientific literature:

**Definition:** A postural management programme is a planned approach encompassing all activities and interventions which impact on an individual’s posture and function. Programmes are tailored specifically for each child and may include special seating, night-time support, standing supports, active exercise, orthotics, surgical interventions, and individual therapy sessions.

1. Individually-tailored postural management programmes are helpful for children with bilateral CP to facilitate communication, cognitive and functional skills, and enhance participation. Postural management programmes aim to increase children’s comfort and may reduce deformity.

2. The nature of the postural intervention while dependent on individual circumstances, can be guided by a child’s level of functioning according to the Gross Motor Function Classification System (GMFCS).

3. Children in GMFCS groups IV-V should start 24-hour postural management programmes in lying as soon as appropriate after birth, in sitting from 6 months, and in standing from 12 months.

4. Children with a motor disorder at GMFCS level III require postural management programmes that emphasize postural activity from an early age.

5. Close surveillance should be maintained for the development of postural or positional deformity to soft tissues and bony structures. We agree with recommendations that all children who cannot walk more than 10 steps by the age of 30 months should have a hip X-ray to measure migration percentage of each hip, and this should be repeated every 6 to 12 months until the age of 7 years, or when further deformity is unlikely. Spine X-rays should be considered for all children in GMFCS groups V and IV who are unable to stand by the age of 5 years, at 5, and 10 years as a minimum.

6. Intervention to prevent deformity is provided as an integrated approach between postural management equipment, activity, and surgery. Decisions regarding which intervention is chosen should be based on a child’s clinical and functional activities, pain levels, sleep assessment, hip migration percentage, long-term prognosis, and the implications of the interventions in social and emotional terms. Regarding the hip, for example, if the migration percentage is more than 14% at 30 months then postural management at night and ongoing radiological monitoring are recommended.

7. Postural care pathways and training are needed to enable the active understanding and involvement of all those directly involved with the child, professionals, parents, wheelchair services, education, and respite carers.

8. More evidence for the effectiveness of intervention needs to be obtained and this could be achieved from multicentre collaboration in the following ways:

A uniform vocabulary used for postural/positional deformity.

Each centre should contribute to a central database of children needing postural management programmes.* This should include results of radiological surveillance, interventions, and assessments. The latter would include standard measures such as the Pediatric Evaluation of Disability, Gross Motor Function Measure, Chailey Levels of Ability, Paediatric Pain Profile, and measures of Quality of Life.

A programme of research to evaluate postural management programmes.

*The rehabilitation technology information service (ReTIS).

**Tina Gericke**

**DOI:** 10.1017/S0012162206000685

**Participants**

Dr Geoff Bardsley, Clinical Engineer, Tott Centre, University of Dundee
Eva Bower MSCP PhD, Clinical Paediatric Physiotherapist, London
Keith Brown, Paediatric Neurologist, Edinburgh
Sandy Clarke, CSIP/ICES, DoH
Donna Cowan BSc PhD, Clinical Engineer, Chailey Heritage, East Sussex
Jeremy Fairbank MD FRCS, Nuffield Orthopaedic Centre, Oxford
Prof Mijna Hadders-Algra MD, PhD, University of Groningen
Cheryl Honeycombe PhD, Occupational Therapist, Winchester
Ginny Humphreys MSc, Paediatric Physiotherapist, Exeter
Tina Gericke MSc, Paediatric Occupational Therapist, Winchester
Alice Goldwyn MSc BEng CSi MIPM, Chailey Heritage, East Sussex
Dr Yasmin Kahn, Paediatrician, Chailey Heritage, East Sussex
Rachel McDonald, BAppSc (OT), PGDip (Biomechanics), PhD, Institute of Child Health, London
Margaret J Mayston PhD MCSP, Dept. of Physiology, UCH, London, the Bobath Centre, London
Christopher Morris, Orthotist, Nuffield Orthopaedic Centre/Wolfson College, University of Oxford,
Dr Richard Morton, Paediatrician, Derby and Nottingham
Carolyn Nichols BSc MCSP PGDip, (Design of Equipment for Disability) Physiotherapist
Carol Oviett Ham, Head Teacher, Rutland House School, Nottingham
Mark Patterson, Orthopaedic Surgeon, London
Sallie Parker, mother and co-founder of North Devon’s Postural Management Group
David Porter PhD MSc BSc, Clinical Scientist, Oxford Brookes University
Terry Pountney PhD MA MCSP, Research Physiotherapist, Chailey Heritage, East Sussex
David Scrutton MSc MCSP Honorary Senior Lecturer, Institute of Child Health, London

To comment on this consensus statement, go to the Forum section at www.mackeithpress.org