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## Recent Developments in Healthcare for Cerebral Palsy: Implications and Opportunities for Orthotics

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**Key words:** Cerebral palsy, orthotics, multidisciplinary international consensus conference.

### Background

Recent developments in the conceptualisation of disability (1), the definition and classification of cerebral palsy (CP), treatment goals, and research on the effectiveness of a variety of interventions require synthesis for allied health professionals in clinical practice.

### Method

In September 2008, a multidisciplinary consensus conference was convened by the International Society for Prosthetics and Orthotics (ISPO) to consider research and contemporary thinking on the management of cerebral palsy. An international group of 24 healthcare professionals and researchers participated in the conference, which was held at Wolfson College, Oxford.

Before the conference, reviewers synthesised the best available published evidence and graded their findings using the Oxford Centre for Evidence-based Medicine Levels of Evidence.

Reviews were presented on *the definition and classification of CP, classification of gait in CP, physiotherapy, occupational therapy, medical management, orthopaedic management and orthotic management*.

Each review was considered and discussed in small groups and plenary sessions, following which conclusions and recommendations were drafted by the convenors and agreed by participants.

### Implications for practice

The consensus conference report, together with the review papers provides a valuable educational resource (2). The conclusions and recommendations provide a nominal expert group consensus on the best available evidence on various aspects of the management of CP, including:

- *physiotherapy interventions including frequency, duration, intensity and timing of treatment*
- *occupational therapy including the use of seating and positional devices, constraint-induced movement therapy and virtual reality*
- *medical management, including nutrition, spasticity management and weight-bearing programmes*
- *orthopaedic surgery including single event multilevel surgery, and treatment of equinus, hip subluxation/dislocation, scoliosis and the upper limb*
- *orthotic management of the lower limb, the upper limb and spine, and the use of Lycra garments*

Healthcare for people with CP requires the skills and input of a variety of healthcare professionals who must work efficiently and collaboratively with the family as a team to prioritise goals and to plan management regimes. The ultimate aim of healthcare provision in CP is to enable activities and participation by promoting efficient movement, limiting deformity, reducing pain, and employing cognitive and/or behavioural strategies.

A 'family-centred' approach to delivering healthcare is likely to improve the wellbeing of children and their parents, with parental wellbeing believed to be associated with improved outcomes for the child. Classification of gross motor function using the Gross Motor Function Classification System (GMFCS) (3, 4) and manual abilities using the Manual Abilities Classification System (5) of individuals with CP has enabled healthcare professionals to communicate with each other, and with parents, who appear to find these 'levels' of function both acceptable and useful in understanding their child's status. The GMFCS is recommended as a framework for planning orthotic management of children and young people with CP.

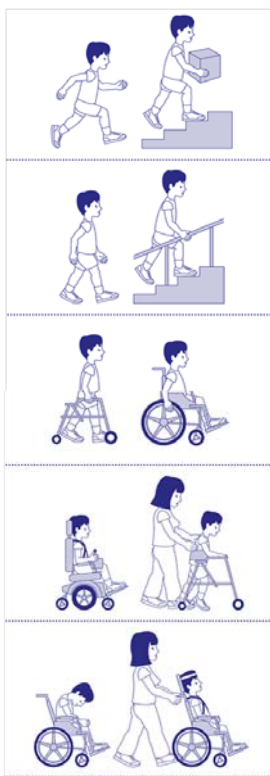
### Further information

The full report of the consensus conference can be downloaded free of charge from [www.ispoint.org](http://www.ispoint.org)

ISPO UK is holding a multi-disciplinary meeting with an international faculty who will be reporting the conclusions and continuing the dialogue on the findings of the consensus conference on Thursday 14<sup>th</sup> and Friday 15<sup>th</sup> January 2010, in the Centre for Life, Newcastle Upon Tyne. Further information at [www.cpconsensus.org.uk](http://www.cpconsensus.org.uk)

### References

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### GMFCS levels I – V

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