

Biomechanical Principles of Common Orthotic Treatment Concepts for Gait Problems in Cerebral Palsy – A Critical Consideration

Daniel Sabbagh¹, Jörg Flor¹, Ralf Genta¹

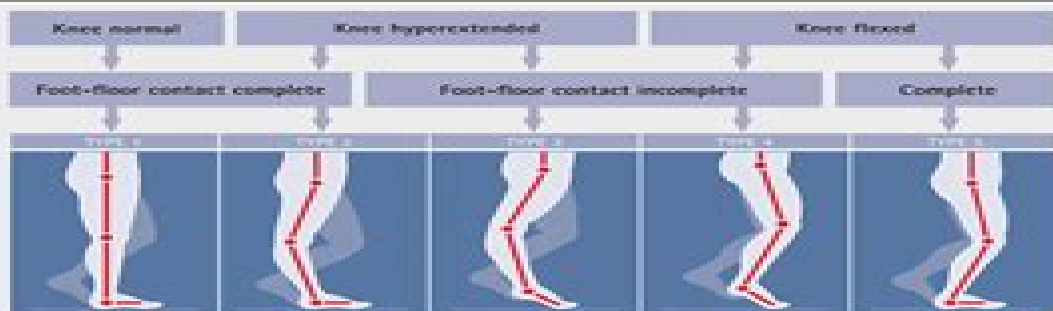
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Aims

The major goal of an orthotic treatment in cerebral palsy (CP) is to come closer to a physiological gait. An ankle foot orthosis (AFO) prepares the foot for initial contact, enables stability and supports the ankle's push-off. It should have a positive effect on therapy, reduce energy consumption and must not block remaining physiological motion.

The Amsterdam Gait Classification evaluates knee position and foot-floor contact in mid stance in order to determine the requirements for an orthotic treatment.

Respecting the gait types of the Amsterdam Gait Classification, a detailed consideration of existing AFO types should indicate whether all requirements for an effective orthotic treatment can be met.



Methods

The effects of common AFOs are evaluated. The basic goals of an orthotic treatment result from the Amsterdam Gait Classification: allowing plantar flexion, establishing physiological foot-floor contact and knee extension, supporting push off. Additionally, the AFO should be adjustable to changes of the gait. Certain biomechanical features of an AFO help to achieve these goals.

Considering criteria of adjustable range of motion, defined pivot point, spring force, shell design and adjustable alignment, solid AFO (SAFO), dynamic AFO (DAFO), floor reaction AFO (FRAFO), posterior leaf spring AFO (PLS AFO) and hinged AFO (HAFO) are compared.



Results

	Adjustable Alignment	Adjustable Range of Motion	Plantar Flexion Response	Support Spring Force	High Spring Force	Defined Pivot Point
SAFO	✗ not after manufacturing	✗ not possible	✗ if activities limitation is not fixed ✓ if activities limitation is not fixed in AFO	✗ not after manufacturing	✗ not possible	✓
DAFO	✗ not after manufacturing	✗ not possible	✗ high flexion carbon fibre AFO ✓ postoperative AFO	✗ not after manufacturing	✗ postoperative AFO ✓ high flexion carbon fibre AFO	✗ not possible
FRAFO	✗ not after manufacturing	✗ not possible	✗ not applicable	✗ not possible	✗ not applicable	✗ not applicable
PLS AFO	✗ not adjustable pivot point ✓ adjustable points	✗ not adjustable pivot point ✓ adjustable points	✗ heel-toe off-rolling in joints will lose force ✓ joints with separate points spring forces	✗ not adjustable pivot point ✓ adjustable points	✗ enhancement on coil spring joints ✓ e.g. thin spring joints	✓
HAFO	✗ not after manufacturing	✗ not possible	✗ not possible	✗ not after manufacturing	✗ enhancement on coil spring joints ✓ carbon fibre, rigid sole with stiff points	✗ stiff ankle type ✓ longest type HAFO
Spring AFO	✗ not after manufacturing	✗ not possible	✗ not possible	✗ not after manufacturing	✓	✗ not possible

Discussion

Due to an appropriate orthosis, coming closer to a physiological gait and improving energy consumption is possible for children with CP. Common AFOs do not fulfil all necessary requirements because basic adjustment possibilities are missing (see results). Gait types 3 to 5 of the Amsterdam Gait Classification require high to extra high spring forces in the ankle joint in addition to a ventral shell for achieving physiological knee extension in mid stance. Due to changes in gait the spring forces must be variable.

Passive plantar flexion in loading response depends on adjustable range of motion and a defined pivot point. Resulting eccentric muscle work supports therapy. The correct alignment of the orthosis using biomechanical principles is essential, especially when tuning the AFO.

The resulting demand is: Both dynamic and static AFOs should be produced with an adjustable ankle joint!

References

- Bertoni JB [2002]. J Prosthet Orth 144(4): 143-149.
 Morris C, Condie D. [2009]. Copenhagen: ISPO.
 Nolan KJ et al. [2011]. Clin Biomech 26(8): 655-660.
 Novackchek TF et al. [2009] London: Max Keith Press, 327-348.
 Överin E. [2008]. Prosthet Orth Int 34(3): 264-269.
 Romkes J et al. [2006]. Gait Posture 24(4): 467-474.

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web sep 10 2014 desulphation is a useful way of extending lead acid battery life but pulsing the battery with energy stored in an inductor has nothing to do with that pulsing just momentarily forces the terminal voltage of the battery to a region where some benefit occurs due to the overvoltage this is called equalization

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web circuit descriptions the circuit is in essence a very widely used form of switching dc to dc converter which can take a dc voltage and step it up to a higher level figure 1 shows the version which is specifically for 12 volts systems the basic pulse rate is set by the venerable 555 timer chip u1 which switches the mosfet q1 at a 1 khz rate