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題目 (Title):

平地與斜坡步行：患有腦性麻痺兒童在室外情境中的行走代償
(Level Versus Inclined Walking: Ambulatory Compensations in Children With Cerebral Palsy Under Outdoor Conditions)

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目的 (Purpose):

探究患有腦性麻痺兒童在傾斜的室外步行情境中如何調整步態
(To investigate how children with cerebral palsy (CP) adapt their gait to inclined outdoor walking conditions.)

方法 (Methods):

10 位患有腦性麻痺，粗大動作功能分類第二級的兒童，與 10 位一般發展兒童參與此研究。在 4 種不同情境中：室內走道、室外走道、及上/下 7°的坡道；分別計算其行走速度、步長，以及踝、膝、髖與軀幹的矢狀面角度。
(Ten children with CP, Gross Motor Function System level II, and 10 children with typical development participated. Walking velocity, stride length and ankle, knee, hip, and trunk sagittal plane angles were calculated for 4 conditions: indoor walkway, outdoor walkway, and walking up and down a 7° inclined ramp.)

結果 (Results):

室內與室外平地步行的步態參數沒有差異。在上坡情境中，兩組在腳掌著地時的髖與膝屈曲角度均有增加以適應斜坡。在下坡情境中，兩組在站立中期的膝屈曲角度增加以降低身體重心。患有腦性麻痺兒童上坡步行時軀幹前傾角度較大(P < .005)，下坡步行時軀幹後傾角度也較大(P < .0001)。
(Gait patterns were unchanged between indoor and outdoor level walking. During up-slope walking, both groups increased hip and knee flexion at foot strike to accommodate the slope. During down-slope walking, both groups increased knee flexion in midstance to lower the body down the slope. Children with CP had greater forward trunk lean [P < .005] during up-slope walking and greater posterior trunk lean during down-slope walking [P < .0001].)

結論 (Conclusions):
患有腦性麻痺兒童在傾斜步行情境中的調適與同儕相似，但運用更多姿勢調整策略。
(Children with CP adapt to inclined walking conditions similarly to peers but use greater postural adaptations.)