原作者及出處 (Original):

Christy, Jennifer B.; Payne, JoAnne; Azuero, Andres; Formby, Craig
Pediatric Physical Therapy. 26(2):180-189, Summer 2014.
doi: 10.1097/PEP.0000000000000039

題目 (Title):

兒童前庭功能臨床測試的信度與診斷準確性
(Reliability and Diagnostic Accuracy of Clinical Tests of Vestibular Function for Children.)

翻譯者 (Translator):

黃維彬 (Wei-Pin Huang, PT, MS)
弘光科技大學專技副教授 台中 台灣
(Associate Professor Rank Specialist, Department of Physical Therapy, College of Medicine, Hungkuang University, Taichung, Taiwan)

校閱者 (Reviewer):

廖華芳 (Hua-Fang Liao)
台灣大學醫學院 物理治療學系暨研究所 兼任副教授 台北 台灣
(Adjunct Associate Professor, School of Physical Therapy, College of Medicine , National Taiwan University, Taipei, Taiwan)

目的 (Purpose):

決定兒童前庭功能臨床測試的信度，診斷價值，最小可偵測之改變值及其 90%信賴區間
(To determine reliability, diagnostic values, and minimal detectable change scores, 90% confidence (MDC90) of pediatric clinical tests of vestibular function.)

方法 (Methods):

20位重至極重度感覺神經性耳聾和20位一般發展兒童，年齡為6-12歲，分別接受頭部投擲試驗(head thrust test)，埃默里前庭椅測試，戽斗測試(Bucket Test)，動態視力檢查，感覺統合之臨床平衡測試修正版和感覺整合測試二次，以評估再測信度。以旋轉椅和前庭誘發電位為參照標準測試。分別計算其信度、敏感度、特異度、預測值、概率比和最小可偵測之改變值的90%信賴區間。
(Twenty children with severe to profound bilateral sensorineural hearing loss and 23 children with typical development, aged 6 to 12 years, participated. The Head Thrust Test, Emory Clinical Vestibular Chair Test, Bucket Test, Dynamic Visual Acuity, Modified Clinical Test of Sensory Interaction on Balance, and Sensory Organization

Test were completed twice for reliability. Reference standard diagnostic tests were rotary chair and vestibular evoked myogenic potential. Reliability, sensitivity, specificity, predictive values, likelihood ratios, and MDC90 scores were calculated.)

結果 (Results):

信度結果為組內相關係數值 0.73 到 0.95。以曲線下面積最大決定其切截點時，各種測量的敏感度，特異度以及預測值之範圍由 63%到 100%。動態視力檢查及簡易感覺統合之臨床平衡測試的最小可偵測之改變值的 90%分別為 8 驗光字體及 16.75 秒。

(Reliability ranged from an intraclass correlation coefficient of 0.73 to 0.95. Sensitivity, specificity, and predictive values, using cutoff scores for each test representing the largest area under the curve, ranged from 63% to 100%. The MDC90 for Dynamic Visual Acuity and Modified Clinical Test of Sensory Interaction on Balance were 8 optotypes and 16.75 seconds, respectively.)

結論 (Conclusions):

臨床測試可準確找出前庭功能低下的兒童。

(Clinical tests can be used accurately to identify children with vestibular hypofunction.)