

A Comparison Between Three Functional Hip Scores for Evaluation of the Pediatric Hip

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INTRODUCTION: This investigation aimed to determine the degree of agreement among three functional scales for evaluating the hip in pediatric patients and determine which has the best correlation with global function and outcome.

METHODS: We performed a prospective study applying the Harris Hip Score (HHS), the Iowa Hip Score (IHS), the Children's Hospital Oakland Hip Evaluation Scale (CHOHES), and the Pediatric Outcomes Data Collection Instrument (PODCI) to 173 consecutive patients with diverse pathology of the hip already being followed for hip dysplasia, slipped capital femoral epiphysis, or Legg-Calve-Perthes disease. We assessed the Global Functioning Scale and the Sports and Physical Functioning Core Scale of the PODCI. We determined the degree of correlation between each functional hip scale and between each hip scale and the PODCI scales using Pearson and Spearman correlation coefficients. In this evaluation, a coefficient of one equals absolute agreement.

RESULTS: The correlation between the HHS and IHS scores was 0.71; between the IHS and CHOHES scores was 0.78, and between the HHS and CHOHES scores was 0.64. The correlation between the Global Functioning Scale of the PODCI and the three hip scores was as follows: 0.51 for the HHS; 0.64 for the IHS; and 0.67 for the CHOHES. The correlation between the Sports and Physical Functioning Core Scale of the PODCI and the three hip scores was as follows: 0.56 for the HHS; 0.66 for the IHS; and 0.68 for the CHOHES.

DISCUSSION AND CONCLUSION: None of the three most commonly used hip scores showed a reasonable correlation with the Global Functioning Scale or Sports and Physical Functioning Core Scale of the PODCI. The best correlation was found between the CHOHES and both scales of the PODCI. The most commonly used scores to determine the outcome of pediatric patients with hip pathology are insufficient, have a poor agreement among one another, and do not necessarily relate to functional results.