Orthopedics Abstracts

Title: ACTIVITY LEVEL, IMPAIRMENT AND QUALITY OF LIFE AMONG CHILDREN WITH SPINA BIFIDA

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Background: The goal of this study is to help clinicians understand the activity level, impairment and quality of life in children with spina bifida.

Method: 50 subjects were chosen as a sample of convenience from our clinic population of 194 children with myelomeningocele. Guardians were interviewed using standardized functional assessment tools including: Pediatric Quality of Life (PedsQL), Gillette Functional Assessment Questionnaire (FAQ) and the Pediatric Outcomes Data Collection Instrument (PODCI).

Results: Fifty subjects (24 M, 26 F; 11.5±3.9 years of age) gave their informed consent to participate in this IRB-approved protocol. Motor levels were classified as L2 and above n=15, L3-5 n=35. 43 (86%) of the 50 children had shunts. 10 walked independently, 21 walked with an assistive device full time, 5 walked with an assistive device at home and a wheelchair in the community and 14 used a wheelchair full time. PedsQL average total quick score was 1362±331.2 (highest possible score of 2300) with deficits found in all the 4 scales with the lowest average score in the area of health over the past month. Average FAQ subscale 1 score was 5.7+3.5 with 10 (walks, runs, climbs stairs and keeps up with peers) being the highest score. Balance, endurance and weakness were sighted as the most limiting factors. Seven subscales of the PODCI were evaluated with maximum sub-score of 100. Subjects scored the lowest in sports and physical function (40.7±26.4), transfers and basic mobility (68.0± 25.0), and in global function and symptoms (65.7±23.5).

Conclusion: This study provides insight in the activity level and quality of life in children with spina bifida. Overall, subjects had low functional scores and decreased quality of life. These outcome tools are useful in providing a clinical picture of deficits requiring further intervention.