

Developmental Pediatrics

Title: AN OVERVIEW OF A PROJECT TO ASSESS THE EFFECTIVENESS OF BOWEL AND BLADDER MANAGEMENT TECHNIQUES FOR CHILDREN WITH SPINA BIFIDA

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Background: Urinary and bowel incontinence are nearly universal in individuals with spina bifida. Untreated, incontinence leads to significant limitations and participation in life activities. Achievement of bowel and bladder continence enables full participation in typical vocations and avocations, and significantly affects self-esteem and quality of life.

This study includes two components: a longitudinal retrospective study and a cross-sectional observational study using both quantitative and qualitative methods to assess the effectiveness of selected bowel and bladder interventions on both physiologic outcomes and quality of life measures. The objectives of the project were to 1) identify commonly used intervention strategies for promoting bowel and bladder continence in children 2) evaluate reliable and valid outcomes using both physiologic as well as quality of life measures; and, 3) determine the most effective intervention strategies.

Method: Data was gathered through chart reviews, a preexisting longitudinal database, standardized parent and child rating scales and child, parent and practitioner focus groups. Analysis was conducted to investigate the associations between continence status, medical and surgical interventions, and quality of life as assessed by the child and parent.

Results: Continence is difficult to quantify, and differences exist in definitions and acceptable degrees of wetness or numbers of accidents. Additional factors, including mobility and weight, appear to affect continence as well. Practitioners and parents characterize bowel and bladder management in different ways. While children are placed on various medications and programs to promote continence, there is little clear evidence that one is superior to another.

Conclusion: Achievement of bowel and bladder continence is an important goal for children with spina bifida due to its far reaching impact on both physiologic and social outcomes. A number of factors appear to influence continence: child and family participation in the prescribed program, environmental factors, medications prescribed, and surgical interventions.