OUTCOMES OF SURGICAL PROCEDURES IN CHILDREN WITH CEREBRAL PALSY

Introduction: Children with cerebral palsy (CP) commonly have co-morbid conditions that may increase the risk of complications following surgical interventions. Current knowledge of surgical outcomes with CP is limited.

Objectives: To define outcomes following the five most commonly performed surgical procedures in children with CP; to compare surgical outcomes in children with and without CP; to identify associations between patient characteristics and surgical outcomes.

Methods: We completed an unweighted descriptive analysis of the Kids’ Inpatient Database, a sampling of pediatric discharges from US hospitals in 1997.

Results: The five surgeries most commonly performed in children with CP were gastrostomy tube placements, soft tissue musculoskeletal procedures, fundoplications, spinal fusions with instrumentation, and bony hip surgeries. Children with CP vs. no CP who underwent spinal fusions had longer LOS (10 days vs. 6.7, p = <0.01), more secondary diagnoses of pneumonia (5.26% vs. 0.92%, p<0.01), more aspiration pneumonia (3.51% vs. 0.11% p<0.01), more failure to thrive (9.47% vs. 1.42%, p<0.01), and more UTIs (5.25% vs. 1.99%, p<0.01).

Overall, the number of coded diagnoses correlated positively with LOS, total charges and number of procedures performed (p<0.01).

Conclusions: With notable exceptions, children with CP encounter complications from surgical procedures more often than those without CP.