Objective: To demonstrate that a nutritional support intervention, via naso-enteral tube-feeding or gastrostomy, has a significant impact on the nutritional status and body composition in severely malnourished children with cerebral palsy spastic quadriplegia.

Methods: Thirteen patients with moderate/severe malnutrition and cerebral palsy spastic quadriplegia who were fed via naso-enteral tube-feeding or gastrostomy were included in a cohort study. Anthropometric measurements and estimated body composition by bioelectric impedance analysis were obtained. ANOVA and Wilcoxon tests were used. Results: During the four weeks of nutritional recovery, an average weight increase of 2700 g was achieved. There were significant increases in anthropometric indicators, including BMI and weight/length (p < 0.01). The increase in arm fat area was significantly higher than the increase in arm muscle area (104.5 vs 17.5%). Conclusion: Intensive nutritional support for four weeks had a significant effect on the nutritional status and body composition of severe and moderately malnourished children with cerebral palsy spastic quadriplegia.

Keywords