**Supplementary Data:**

The study wasn’t significantly powered to identify risk factors of polyneuropathy. We couldn’t identify any difference between the groups with and without polyneuropathy with respect to clinical characteristics, therapeutic interventions and micronutrient levels (Supplementary Table 1).

**Supplementary Table 1. Comparison of various characteristics between the Polyneuropathy (n=29) and no Polyneuropathy (n=3) group**

|  |  |  |  |
| --- | --- | --- | --- |
| **Characteristics, n=32** | **No Polyneuropathy n=3** | **Polyneuropathy n=29** | **P Value** |
| Age (months), median (IQR) | 84 (74-84) | 84 (38-132) | 0.974 |
| Male, n (%) | 2 (66.7%) | 21 (72.4%) | 1.000 |
| PIM 2 predicted mortality (%), median (IQR) | 4.9 (4.7-9.4) | 5.1 (3.6-7.8) | 0.698 |
| WAZ, median (IQR)LAZBAZ | -1.96 (-4.81 to -1.01)0.24 (-1.69 to 0.41)-1.93 (-7.88 to -1.3) | -1.42 (-2.87 to 0.05)-1.09 (-2.41 to -0.1)-1.07 (-2.6 to -0.35) | 0.3150.2860.232 |
| Diagnosis; n (%)RespiratoryCardiovascularGastrointestinalRenalNervous systemOther | 1 (33.3%)01 (33.3%)001 (33.3%) | 2 (6.9%)5 (17.2%)4 (13.8%)7 (24.1%)5 (17.2%)6 (20.7%) | 0.526 |
| SIRS, n (%) | 2 (66.7%) | 29 (100%) | 0.094 |
| Sepsis, n (%) | 2 (66.7%) | 29 (100%) | 0.094 |
| MODS, n (%)Organ dysfunction, n (%)RespiratoryCardiovascularNeurologicalHematologicalRenalHepatic | 2 (66.7%)3 (100%)2 (66.7%)02 (66.7%)1 (33.3%)0 | 29 (100%)29 (100%)19 (65.5%)5 (17.2%)20 (69%)10 (34.5%)14 (48.3%) | 0.094-1.0001.0001.0001.0000.238 |
| TPN Use, n (%)Steroids Use, n (%)Neuromuscular Blockers’ Use, n (%)Hypoalbuminemia, n (%) Vasopressor Use, n (%) | 02 (66.7%)1 (33.3%)02 (66.7%) | 4 (13.8%)26 (89.7%)4 (13.8%)13 (44.8%)19 (65.5%) | 1.0000.3400.4100.2591.000 |
| Micronutrients level, median (IQR)Vitamin B12 (pg/mL)Vitamin B12 deficiency, n (%)Copper (mcg/L)Copper deficiency, n (%)Zinc (mcg/L)Zinc deficiency, n (%) Folate (ng/mL)Folate deficiency, n (%) | 1108 (390-1119)01023 (828-1279)1 (33.3%)476 (324-503)3 (100%)13.2 (9.7-14.9)0 | 1016 (322-1111)4/28 (14.3%)1030 (843-1153)13/28 (46.4%)539 (372-973)18/28 (64.3%)7.3 (3.2-16.1)8/28 (28.6%) | 0.5921.0000.9461.0000.3490.5330.6020.550 |

BAZ: BMI for age Z score; IQR: inter-quartile range; LAZ: Length for age Z score; MODS: Multi-organ dysfunction syndrome; PIM: Pediatric Index of Mortality; SIRS: Systemic inflammatory response syndrome; TPN: Total parenteral nutrition; WAZ: Weight for age Z score. Cut-offs for micronutrient deficiency: Vitamin B12 deficiency <200 pg/ml, Copper deficiency <900mcg/L, Zinc deficiency <650 ng/mL, Folate deficiency <3.5 ng/mL. Micronutrients levels were not available for one child in polyneuropathy group.