**JPED-D-22-00093 – Supplementary Material**

**Figure S1 - Flow diagram of patient inclusion.**



**Table S1 - Evaluation of thyroid function in newborns receiving PN >15 days.**

|  |
| --- |
| **First measurement (n = 143)** |
| **Variable** | **Value** |
| Age, days a | 43 (31–67) |
| TSH, mU/L | 3.76 (2.24–6.13) |
| fT4, ng/dL | 1.20 ± 0.38 |
| CRP, mg/L | 11.8 (1.10–24.4) |
| **Second measurement (n = 68)** |
| **Variable** | **Value** |
| Age, days b | 62 (48–90) |
| TSH, mU/L | 4.86 (2.77–7.15) |
| fT4, ng/dL | 1.20 ± 0.39 |
| CRP, mg/L | 8.0 (1.0–22.9) |

CRP, C-reactive protein; PN, parenteral nutrition; TSH, thyroid-stimulating hormone; fT4, free thyroxine.

Note: Data expressed as n (%), mean ± SD, or median (interquartile range).

a Age at first measurement.

b Age at second measurement.

**Table S2 - Comparisons between newborns receiving PN >15 days according to TSH measurement: measured versus not measured.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | **TSH measured** **(n = 143)** | **TSH not measured****(n = 57)** | **p** |
| Age at PN initiation, daysa  | 1 (1–1) | 2 (1–3) | <.001 |
| Sex, maleb | 81 (57.3) | 28 (49.1) | .37 |
| Cesarean deliveryb | 102 (71.3) | 38 (66.7) | .63 |
| GA, weeksc | 29 ± 4 | 36 ± 4 | <.001 |
| GA classification, pretermb | 133 (93.0) | 23 (40.4) | <.001 |
| Apgar, 1-minutec | 5 ± 2 | 6 ± 3 | .004 |
| Apgar, 5-minutec | 7 ± 2 | 8 ± 2 | .002 |
| Birth weight, ga | 1030 (765–1535) | 2675 (1995–3108) | <.001 |
| Birth weight classificationb |  |  |  |
| ELBW | 69 (48.3) | 4 (7.0) | <.001 |
| VLBW | 36 (25.2) | 3 (5.3) |
| LBW | 26 (18.2) | 16 (28.1) |
| Normal | 12 (8.4) | 33 (57.9) |
| Length, cmc | 36.8 ± 5.4 | 45.2 ± 4.8 | <.001 |
| Head circumference, cmc | 26.2 ± 3.7 | 31.9 ± 3.4 | <.001 |
| Thoracic circumference, cmc | 23.3 ± 4.2 | 29.3 ± 3.8 | <.001 |
| Abdominal circumference, cmc | 21.7 ± 4.5 | 28.1 ± 4.9 | <.001 |
| Supplemental PNb | 142 (99.3) | 51 (89.5) | .003 |
| PN duration, daysa | 36 (23–49) | 24 (18–30) | <.001 |
| Length of hospital stay, daysa | 89 (62–123) | 35 (27–49) | <.001 |
| Deathb | 14 (9.8) | 9 (15.8) | .34 |

ELBW, extremely low birth weight; GA, gestational age; LBW, low birth weight; PN, parenteral nutrition; TSH, thyroid-stimulating hormone; VLBW, very low birth weight.

Note: Data expressed as n (%), mean ± SD, or median (interquartile range), and p<.05 is considered statistically.

a Mann-Whitney test.

b Chi-square test.

c Student’s T-test.

**Table S3 - Comparisons between newborns with PN >15 days receiving inorganic (Lugol’s) iodine: hypothyroidism versus normal TSH.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | **Hypothyroidism** **(n = 10)** | **Normal TSH****(n = 13)** | **p** |
| Age at PN initiation, daysa  | 1 ( 1–4) | 1 (1–2) | .74 |
| Sex, maleb | 5 (50.0) | 10 (76.9) | .22 |
| Cesarean deliveryb | 7 (70.0) | 9 (69.2) | .97 |
| GA, weeksa | 27 (25–35) | 32 (26–35) | .31 |
| GA classification, pretermb | 9 (90.0) | 11 (84.6) | .70 |
| Apgar, 1-minutea | 4 (2–5) | 7 (2–8) | .13 |
| Apgar, 5-minutea | 7 (5–8) | 8 (4–9) | .61 |
| Birth weight, ga | 683 (593–2110) | 1250 (660–2618) | .38 |
| Length, cma | 32.0 (30.0–43.5) | 38.0 (30.5–46.5) | .45 |
| Head circumference, cma | 23.0 (21.9–31.3) | 28.0 (22.5–30.5) | .48 |
| Thoracic circumference, cma | 20.0 (19.0–21.0) | 25.3 (19.6–29.8) | .18 |
| Abdominal circumference, cma | 17.8 (17.1–19.6) | 20.3 (17.4–27.5) | .20 |
| Supplemental PNb  | 10 (100.0) | 13 (100.0) | - |
| PN duration, daysa | 84 (41–123) | 63 (48–197) | .69 |
| Length of hospital stay, daysa | 127 (71–184) | 166 (115–240) | .29 |

GA, gestational age; PN, parenteral nutrition; TSH, thyroid-stimulating hormone.

Note: Data expressed as n (%), mean ± SD, or median (interquartile range), and p<.05 is considered statistically.

a Mann-Whitney test.

b Chi-square test.