**Risk factors for the development of neonatal sepsis in a neonatal intensive care unit of a tertiary care hospital of Nepal**

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**Additional file 5 The demographic summary of neonatal, maternal and environmental features for 142 enrolled neonates.**

|  |  |  |
| --- | --- | --- |
| Features | n or median | % or IQR |
| Neonatal features |  |  |
| Birth weight (grams) | 2250 | 2300-2700 |
| Low birth weight (1500-2500 grams) | 62 | 43.7 |
| Very birth weight (<1500 grams) | 22 | 15.5 |
| Gestational age (weeks) | 36 | 34.7-35 |
| Preterm (<37 weeks of gestation) | 83 | 58.5 |
| Male | 93 | 65.5 |
| Obstetric and peri-partum features |  |  |
| Premature rupture of membrane for > 18 hours (PROM) | 34 | 23.9 |
| Number of vaginal examination, 3 or more times | 10 | 7.0 |
| Culture positive urinary tract infection in late pregnancy | 6 | 4.2 |
| Culture positive high vaginal infection in late pregnancy | 4 | 2.8 |
| Mode of delivery |  |  |
| Assisted or instrumental delivery | 14 | 9.9 |
| Vaginal delivery | 31 | 21.8 |
| C-section delivery | 96 | 67.6 |
| Post-partum fever | 15 | 10.6 |
| Characteristics of amniotic fluid |  |  |
| Meconium stained  | 21 | 14.8 |
| Clear  | 116 | 81.7 |
| Foul smelling | 0 | 0.0 |
| Fetal distress | 20 | 14 |
| Suctioning at birth | 60 | 42.2 |
| Resuscitation at birth | 26 | 18.3 |
| Intubation at birth | 22 | 15.5 |
| Laboratory features of blood  |  |  |
| Total WBC count in blood (X 103/µl) | 10.9 | 7 - 15.9 |
| Leukopenia (<7,000 WBC/µl) | 92 | 24.3 |
| Leukocytosis (>30,000 WBC /µl) | 19 | 5.0 |
| Total platelets count (X 103/µl) | 191 | 124.5 - 265 |
| Thrombocytopenia (<150,000 platelets/µl) | 125 | 33.7 |
| C-reactive protein (CRP) level (mg/dl) | 9 | 2.5 - 39 |
| Elevated CRP (>6 mg/dl) | 99 | 58.6 |
| Modalities of therapeutic /supportive care |
| Use of ionotropes | 67 | 47.2 |
| Blood transfusion | 52 | 36.6 |
| Insertion of invasive devices |
| Central line types: |  |  |
| Umbilical artery catheter (UAC) | 50 | 35.2 |
| Umbilical vein catheter (UVC) | 59 | 41.5 |
| Intravenous cannula | 124 | 87.3 |
| Respiratory support types: |  |  |
| Mechanical ventilation  | 105 | 73.9 |
| CPAP | 113 | 79.6 |
| Nasal prong  | 50 | 35.2 |
| Spontaneous | 27 | 19.0 |
| Foley's catheter  | 61 | 42.9 |
| Dwelling time of invasive devices (days) |
| *Central line types:* |  |  |
| Umbilical artery catheter (UAC) | 6 | 5-8 |
| Umbilical vein catheter (UVC) | 6 | 4-8 |
| Intravenous cannula | 11 | 7-16 |
| *Respiratory support types:* |  |  |
| Mechanical ventilation  | 5 | 3-10 |
| CPAP | 3 | 2-4 |
| Nasal prong  | 1 | 1-2 |
| Spontaneous | 2 | 1-3 |
| Foley's catheter  | 6 | 5-10 |
| Neonatal feeding features: |
| Never breast fed \* | 120 | 85 |
| Ever breast fed \* | 20 | 14.2 |
| Never spoon fed \* | 116 | 81.7 |
| Ever spoon fed \* | 24 | 16.9 |
| Never fed enterally\* | 23 | 16.2 |
| Ever fed enterally\* | 117 | 82.4 |
| Days not breastfed | 7.5 | 4-12 |
| Days not spoon-fed | 8 | 4-12.2 |
| Days enterally-fed | 4 | 2-7 |
| Outcome |  |  |
| NICU stay >7 days | 65 | 45.8 |
| NICU stay >14 days | 22 | 15.5 |
| Hospital stay >14 days | 53 | 37.3 |
| Days of NICU stay | 7 | 4-12 |
| Days of hospital stay | 16 | 10-26 |
| Final outcome |  |  |
| Survived | 101 | 71.1 |
| Dead | 20 | 14.1 |
| Left against medical advice | 4 | 2.8 |

CPAP, Continuous Positive Airway Pressure

\* The cases were mutually exclusive