**Table 1:**"Demographic and clinical data of studied groups of RD cases"

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **P value** | **MV** | **Bubble CPAP** | **Oxygen** | **Item** |
|  | % | NO | % | NO | % | NO |  | **Sex** |
| 0.6 | 60.8%39.2% | 4831 | 69.2%30.8% | 3616 | 63.1%36.9% | 9455 | **Male****Female** |
| 0.09 | 48.1%51.9% | 3841 | 36.5%63.5% | 1933 | 33.6%66.4% | 5099 | **Full term ≥ 37 weeks****Preterm ≤36 weeks** | **Maturity** |
| 0.001\* | 57%43% | 4534 | 75%25% | 3913 | 89.9%10.1% | 13415 | **Pulmonary****Non-pulmonary** | **Cause** |
| 0.001\* | 7.6%92.4% | 673 | 57.69%42.31% | 3121 | 77.2%22.8% | 11534 | **Improved****Died** | **Outcome** |
| - | 28.2% | 79 | 18.6% | 52 | 53.2% | 149 | **Total** |
| 1. ses (100%)
 |

*NO (%):number and frequency for qualitative date, CPAP:continuous positive air way pressure, MV:mechanical ventilator.*

**Table 2:**"Demographic and clinical data of studied bubble CPAP cases."

|  |  |  |  |
| --- | --- | --- | --- |
| **Item** | **Bubble CPAP success****N=30** | **Bubble CPAP failed****N=22** | **P-value** |
| **Age (months)** | 3.3±5.4 | 2.1±3.3 | 0.4 |
| **Sex**MaleFemale | 24 (66.7%)6 (37.5%) | 12 (33.3%)10 (62.5%) | 0.5 |
| **Birth weight (gm)**NBW ≥2.5LBW 1.5-2.4VLBW 1.1-1.4ELBW ≤1 | 2.3±0.812 (92.3%)14 (77.8%)2 (18.2%)2 (20%) | 1.3±0.51 (7.7%)4 (22.2%)9 (81.8%)8 (80%) | 0.001\* |
| **Gestational age (weeks)**≥3730-36≤29 | 35.7±0.815 (83.3%)15 (60%)0 (0%) | 31.3±3.43 (16.7%)10 (40%)9 (100%) | 0.001\* |
| **Maternal age (years)** | 29.8±6.8 | 25.6±5.3 | 0.02\* |
| **Cause of RD**PulmonaryNon pulmonary | 21 (51.2%)9 (81.8%) | 20 (48.8%)2 (18.2%) | 0.06 |
| **Pathology**RDSPneumoniaMASNSCHD | 11 (36.7%)5 (83.3%)4 (100%)8 (88.9%)2 (66.7%) | 19 (63.3%)1 (16.7%)0 (0%)1 (11.1%)1 (33.3%) | 0.01\* |
| **Length of hospitalization (days)** | 16.6±12.6 | 6.1±4.3 | 0.001\* |

*Independent sample (t) test for analysis of quantitative variables represented by Mean ± SD. Chi – square (x2) for analysis of qualitative data represented by Freq. (%)*

*CPAP: continuous positive air way pressure, BW: birth weight, NBW: normal birth weight, LBW: low birth weight, VLBW: very low birth weight, ELBW: extremely low birth weight. RD: respiratory distress, RDS: respiratory distress syndrome, PN: pneumonia, MAS: meconium aspiration syndrome, NS: neonatal sepsis, CHD: congenital heart disease. \*significant*

**Table 3:** "Analysis of laboratory results of bubble CPAP group of RD cases."

|  |  |  |  |
| --- | --- | --- | --- |
| **Item**  | **Bubble CPAP success****N=30** | **Bubble CPAP failed** **N=22** | **P-value** |
| **Hb (gm/dl)** | At startAt weaning or failure | 14.6±2.412.7±1.6 | 15.2±212.4±2.8 | 0.30.5 |
| **TLC(ulx103)** | At startAt weaning or failure | 13.2±6.110.7±3.4 | 14.1±10.913.6±10.8 | 0.70.2 |
| **Platelet(ulx103)** | At startAt weaning or failure | 193±92206±94 | 205±109142±117 | 0.60.03\* |
| **CRP (mg/dl)** | At startAt weaning or failure | 34±405±6 | 19±3040±34 | 0.10.001\* |
| **pH** | At startAt weaning or failure | 7.3±0.097.38±0.03 | 7.28±0.127.28±0.1 | 0.40.001\* |
| **SO2** | At startAt weaning or failure | 90.5±13.597.3±2.6 | 85.4±11.784.1±10.3 | 0.10.001\* |
| **PO2** | At startAt weaning or failure | 97.9±38.1110.7±21.9 | 94.8±42.487.1±33.1 | 0.70.3 |
| **PCO2** | At startAt weaning or failure | 35.9±11.135.4±4.1 | 35.8±15.635.3±16.1 | 0.90.9 |
| **HCO3** | At startAt weaning or failure | 16.5±5.219.6±2.8 | 15.5±6.916.5±6.9 | 0.60.03\* |

*Independent sample (t) test for analysis of quantitative variables represented by Mean ± SD. Chi – square (x2) for analysis of qualitative data represented by Freq. (%)\*significant. SO2: oxygen saturation, Hb: hemoglobin, TLC: total leucocyte count., CRP: C-reactive protein*