**Table (1) Demographic and laboratory data of studied groups**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Item** |  | **Patients**  **N = 27** | **Controls**  **N = 18** | **P-Value** |
| **Gestational age (Weeks)** | Range  Mean ± SD | 37 – 39  38.6 ± 0.8 | 37 – 40  38.6 ± 0.1 | 0.91 |
| **Weight (Kg)** | Range  Mean ± SD | 2.5 – 3.7  3 ± 0.4 | 2.5 – 3.2  3 ± 0.32 | 0.71 |
| **Sex** | Male  Female | 13 (48.1 %)  14 (51.9 %) | 4(22.2 %)  14 (77.8 %) | 0.17 |
| **Mode of delivery** | NVD  CS | 11 (40.7 %)  16 (59.3 %) | 10 (55.6 %)  8 (44.4 %) | 0.43 |
| **Cord Hemoglobin** (g/dl) | Range  Mean ± SD | 10-16.8  12.7±2.1 | 13-18  15.8±1.5 | 0.001\*\* |
| **WBCs** (x103ul) | Range  Mean ± SD | 2.1-15.1  8.2±3.01 | 9-14  11.2±1.8 | 0.001\*\* |
| **Hematocrit** (%) | Range  Mean ± SD | 31.5-65  44.4±8.6 | 45-60  53.1±5.4 | 0.008\* |
| **Reticulocytes** (%) | Range  Mean ± SD | 0.4-2.5  0.94±0.5 | 0.2-2  0.81±0.56 | 0.55 |
| **RBCs** (x106 /ul) | Range  Mean ± SD | 4-5.5  4.5±0.7 | 4-5.3  4.7±0.4 | 0.49 |
| **Platelets count** (x103ul) | Range  Mean ± SD | 116-450  259.5±65.3 | 150-450  273.1±99.9 | 0.64 |
| **Bilirubin** (mgldl) | Range  Mean ± SD | 2.7-9  5.2±2.2 | 1-2  1.5±0.52 | 0.001\*\* |
| **Cord H2O2** (pg/ml) | Range  Mean ± SD | 10-81  42.7±12.4 | 14-35  24.7±6.1 | 0.001\*\* |

*\*Significant; \*\* highly significant*

*SD: standard deviation; NVD: normal vaginal delivery; CS: Caesarean section*

**Table (2): Comparison between cord blood, 5th day and 7th day H2O2 levels in patients**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Cord H2O2**  **Patients** | **5th day H2O2** | **7th day H2O2** | **P1-**  **value** | **P2-**  **value** | **P3-**  **value** |
| **Range**  **Mean ±SD**  (pg/ml) | 10-81  42.7±12.4 | 51-212  128.4±37.7 | 42-164  84.5±33.4 | 0.001\**\** | 0.01\* | 0.01\* |

*\*Significant; \*\* highly significant*

*P1: between cord & 5th day levels*

*P2: between cord & 7th day levels*

*P3: between 5th & 7th day levels*

**Table (3): Correlations between H2O2 and bilirubin levels in patients**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Item** | **Cord blood H2O2**  (pg/ml) | | **5th day H2O2**  (pg/ml) | | **7th day H2O2**  (pg/ml) | |
| R | p-value | r | p-value | r | p-value |
| **Cord bilirubin** (mg/dl) | 0.81 | 0.001\*\* | 0.12 | 0.52 | 0.02 | 0.89 |
| **5th day Bilirubin**(mg/dl) | 0.46 | 0.014\* | 0.75 | 0.001\*\* | 0.39 | 0.04\* |
| **7th day Bilirubin**(mg/dl) | 0.60 | 0.001\*\* | 0.21 | 0.28 | 0.94 | 0.001\*\* |

*\*Significant; \*\* highly significant*

**Table (4)**: **Correlations between H2O2 (pg/ml) levels and gestational age and birth weight in patients**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Item** | **Cord**  **H2O2** | | **5th day**  **H2O2** | | **7th day**  **H2O2** | |
| r | p-value | r | p-value | r | p-value |
| **Gestational Age** | 0.20 | 0.30 | -0.18 | 0.36 | - 0.06 | 0.97 |
| **Birth Weight** | -.11 | 0.57 | 0.09 | 0.64 | 0.24 | 0.21 |