**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 – 3938.6 ± 0.8 | 37 – 4038.6 ± 0.1 | 0.91 |
| **Weight (Kg)** | Range Mean ± SD | 2.5 – 3.73 ± 0.4 | 2.5 – 3.23 ± 0.32 | 0.71 |
| **Sex** | MaleFemale  | 13 (48.1 %)14 (51.9 %) | 4(22.2 %)14 (77.8 %) | 0.17 |
| **Mode of delivery** | NVDCS | 11 (40.7 %)16 (59.3 %) | 10 (55.6 %)8 (44.4 %) | 0.43 |
| **Cord Hemoglobin** (g/dl) | Range Mean ± SD | 10-16.812.7±2.1 | 13-1815.8±1.5 | 0.001\*\* |
| **WBCs** (x103ul) | Range Mean ± SD | 2.1-15.18.2±3.01 | 9-1411.2±1.8 | 0.001\*\* |
| **Hematocrit** (%) | Range Mean ± SD | 31.5-6544.4±8.6 | 45-6053.1±5.4 | 0.008\* |
| **Reticulocytes** (%) | Range Mean ± SD | 0.4-2.50.94±0.5 | 0.2-20.81±0.56 | 0.55 |
| **RBCs** (x106 /ul) | Range Mean ± SD | 4-5.54.5±0.7 | 4-5.34.7±0.4 | 0.49 |
| **Platelets count** (x103ul) | Range Mean ± SD | 116-450259.5±65.3 | 150-450273.1±99.9 | 0.64 |
| **Bilirubin** (mgldl) | Range Mean ± SD | 2.7-95.2±2.2 | 1-21.5±0.52 | 0.001\*\* |
| **Cord H2O2** (pg/ml) | Range Mean ± SD | 10-8142.7±12.4 | 14-3524.7±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) | 10-8142.7±12.4 | 51-212128.4±37.7 | 42-16484.5±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 |