**Table (1): Associated maternal and neonatal factors with congenital anomalies**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Associated factors** | **Item** | **Cases** | **%** | **Controls** | **%** | P value |
| **Gestational age** | Full termPreterm | 13835 | 58.530.9 | 9776 | 41.569.1 | 0.001\* |
| **Gender** | Male | 109 | 47.6 | 120 | 52.4 | 0.3 |
|  | Female | 64 | 53.8 | 53 | 47.6 |  |
| **Single baby or multiple** | Single baby | 163 | 52.8 | 145 | 47.2 | 0.002\* |
| 2 or more | 10 | 26.3 | 28 | 73.7 |  |
| **Residence** | Rural | 83 | 38,6 | 131 | 61.4 | 0.001\* |
| Urban | 90 | 68.2 | 42 | 31.8 |  |
| **Maternal age (Years)** | Less than 35 | 147 | 48.8 | 154 | 51.2 | 0.2 |
| 35 or more | 26 | 57.8 | 19 | 42.2 |  |
| **Drugs received***§* **during pregnancy** | Yes | 21 | 63.6 | 12 | 36.4 | 0.09 |
| No | 152 | 48.4 | 161 | 51.6 |  |
| **Maternal disease***§* | Yes | 49 | 48.5 | 52 | 51.5 | 0.2 |
| No | 124 | 50.6 | 121 | 49.4 |  |
| **Parity** | Primiparous | 41 | 47.1 | 46 | 52.9 | 0.5 |
| Multiparous | 132 | 50.8 | 128 | 49.2 |  |
| **Previous abortion** | Yes | 48 | 49 | 50 | 51.0 | 0.86 |
| No | 125 | 50 | 124 | 50.0 |  |
| **Consanguineous marriage** | Yes | 86 | 57.3 | 63 | 42.7 | 0.01\* |
| No | 87 | 44.2 | 110 | 55.8 |  |
| **Family history of unfavorable outcome** | Positive | 67 | 52.8 | 12 | 47.2 |  |
| Negative | 106 | 48.4 | 161 | 51.6 | 0.001\* |

*\*P<.0.05 is considered statistically significant*

*§ (common maternal diseases: Diabetes and preeclamia) (common maternal drug intake: anti-hypertensives, prenatal steroids and Levothyroxine)*

**Table (2): Distribution of GIT anomalies in cases group**

|  |  |  |  |
| --- | --- | --- | --- |
| **System** | **Type** | **No.** | **Frequency n=173** |
| **Digestive system** (63) | Tracheoesophageal fistula (TOF) | 17 | 9.8 |
| Duodenal atresia | 10 | 5.8 |
| Imperforate anus | 8 | 4.62 |
| Megacolon | 8 | 4.62 |
| Jejunal atresia | 4 | 2.31 |
| Ileal atresia | 3 | 1.73 |
| Malrotaion | 3 | 1.73 |
| Gastric outlet obstruction | 2 | 1.16 |
| Congenital hypertrophic pyloric stenosis (CHPS) | 2 | 1.16 |
| Ranula | 1 | 0.58 |
| Annular pancreas | 1 | 0.58 |
| Rectal atresia | 1 | 0.58 |
| Anal stenosis | 1 | 0.58 |
| Combined | 1 | 0.58 |
| Colonic atresia | 1 | 0.58 |

**Table (3): Distribution of Musculoskeletal anomalies in cases group**

|  |  |  |  |
| --- | --- | --- | --- |
| **System** | **Type** | **No.** | **Frequency n=173** |
| **Musculoskeletal system (25)** | Achondroplasia | 3 | 1.73 |
| Arthrogryposis | 1 | 0.58 |
| Diaphragmatic hernia | 10 | 5.8 |
| Cloacal exstrophy | 1 | 0.58 |
| Bilateral hip dislocation | 1 | 0.58 |
| Gastroschisis | 4 | 2.31 |
| Exomphalos major | 2 | 1.16 |
| Exomphalos minor | 1 | 0.58 |
| Sacrococcygeal teratoma | 1 | 0.58 |
| Prune belly syndrome | 1 | 0.58 |

**Table (4): Distribution of CVS anomalies in cases group**

|  |  |  |  |
| --- | --- | --- | --- |
| **System** | **Type** | **No.** | **Frequency n=173** |
| **Cardio-vascular system (**22) | Patent Ductus Arteriosus (PDA) | 6 | 3.47 |
| Atrial Septal Defect (ASD) | 5 | 2.9 |
| Duct dependent cyanotic heart disease | 3 | 1.73 |
| Complex | 3 | 1.73 |
| Ventricular septal defect (VSD) | 1 | 0.58 |
| Tricuspid atresia | 1 | 0.58 |
| Extreme fallot′s tetralogy | 1 | 0.58 |
| Total anomalous pulmonary venous return (TAPVR) | 1 | 0.58 |
| Transposition of great arteries (TGA) | 1 | 0.58 |

**Table (5): Distribution of CNS anomalies in cases group**

|  |  |  |  |
| --- | --- | --- | --- |
| **System** | **Type** | **No.** | **Frequency n=173** |
| **Central Nervous System (CNS) (18)** | Myelomeningocele | 6 | 3.47 |
| Hydrocephalus | 5 | 2.89 |
| Combined | 1 | 0.58 |
| Encephalocele | 3 | 1.73 |
| Meningocele | 3 | 1.73 |

**Table (6): Distribution of other anomalies in cases group**

|  |  |  |  |
| --- | --- | --- | --- |
| **System** | **Type** | **No.** | **Frequency n=173** |
| **Other congenital** **anomalies (**23) | Multiple | 22 | 12.72 |
| Conjoined Twins | 1 | 0.58 |
| **Urinary system** (15) | Polycystic kidney | 5 | 2.89 |
| Posterior urethral valve | 4 | 2.3 |
| Bilateral hydronephrosis | 2 | 1.16 |
| Multicystic dysplastic kidney disease | 2 | 1.16 |
| Ectopia vescica | 1 | 0.58 |
| Combined | 1 | 0.58 |
| **Respiratory system** (4) | Bilateral choanal atresia | 4 | 2.3 |
| **Chromosoma**l (2) | Down syndrome | 2 | 1.16 |
| **Ear, eye, face neck** (1**)** | Microphthalmos | 1 | 0.58 |