

Table (1) comparison between cases and control groups regarding demographic characteristics

Item	Cases N=30	Controls N=30	P-value
Gestational age weeks	38.9±1.7	39.1±1.6	0.656
Mothers age in years (mean ±SD)	29.5±7.2	29.1±8.5	0.961
Weight in kg (mean ±SD)	3.2±0.56	3.1±0.53	0.410
Sex: N (%)			0.196
Males	17(56.7%)	12(40%)	
Females	13(43.3%)	18(60%)	
Mode of delivery: N (%)			0.605
NVD	15(50%)	13(43.3%)	
CS	15(50%)	17(56.7%)	
Consanguinity			
Negative	15(50%)	12(40%)	0.43
Positive	15(50%)	18(60%)	

Table (2): Comparison between cases and controls regarding serum vitamin D level and other laboratory tests

Item	Cases N=30	Controls N=30	P-value
pH (mean ±SD)	6.82±0.14	7.39±0.03	<0.001**
BE (mean ±SD)	-15.1±2.3	0.53±2.2	<0.001**
Haemoglobin (gm\dl)	16.1±2.5	16.1±1.8	0.977
TLC (10³)	(16.2±9.05)	(15.7±5.3)	0.768
Platelets count (10³)	(272±144.6)	(327.2±133.3)	0.080
CRP			0.076
Normal	27(90%)	30(100%)	
Abnormal	3(10%)	0(0%)	
Electrolytes:			
Sodium (meq\L)	139±4	140±4.5	0,97
Potassium (meq\L)	4 ±0,5	4,2 ±0,7	0,89
Calcium (mg\dl)	8.85±0.3	9±0.5	0.8
Urea (mg\dl)	25.9±10.08	30.03±8.9	0.104
Creatinine (mg\dl)	0.76±0.15	0.58±0,18	<0.001**
Vitamin D(mean ±SD)ng\l	15.2±7.5	25.5±3.2	<0.001**
Mother Vitamin D (ng\l)	18.7 ±7.2	28.01	<0.001**

P value< 0.05: significant.

P value< 0.01: highly significant.

Table (3): Comparison between cases and controls regarding CT finding

Item	Cases N=30	Controls N=30	p-value
Normal	7(23.3%)	30(100%)	<0.001**
Brain edema	6(20%)	0(0%)	
Hypoxia	17(56.7%)	0(0%)	

P value< 0.05: significant.

P value< 0.01: highly significant.

Table (4): Serum vitamin D level in cases and control groups

Item	Cases N=30	Controls N=30	p-value
Normal (≥ 20ng/ml)	8(26.7%)	27(90%)	<0.001**
Insufficiency (15-20 ng/ml)	7(23.3%)	3(10%)	
Deficiency (<15ng/ml)	15(50%)	0(0%)	

P value< 0.05: significant.

P value< 0.01: highly significant.

Table (5): Comparison between serum vitamin D level in cases group and their mothers

Item	Cases N=30	Mothers N=30	p-value
Normal (≥ 20ng/ml)	8(26.7%)	8(26.7%)	0.7
Insufficiency(15-20 ng/ml)	7(23.3%)	10(33.3%)	0.5
Deficiency (<15ng/ml)	15(50%)	12(40%)	0.6

Analysis of qualitative data by Z test, p-value is considered significant at <0.05