Table (1): Comparison between cases and control groups regarding the demographic data

Parameter		Groups (n= 60)		P. value
		Group (I) Cases (n=30)	Group (II) Control (n=30)	
Age (days)		6.9 ± 1.8	6.6 ± 2.1	0.60
Gestational age (wks.)		38.2 ± 1.0	38.1 ± 1.1	0.71
Weight (kg)		3.29 ± 0.37	3.54 ± 0.61	0.25
Sex	**Males**	17 (56.7%)	22 (73.3%)	0.17
	Females	13 (43.3%)	8 (26.7%)	
Mode of delivery	**NVD**	16 (53.3%)	14 (46.7%)	0.61
	CS	14 (46.7%)	16 (53.3%)	
Consanguinity	**Negative**	15 (50.0%)	12 (40.0%)	0.43
	Positive	15 (50.0%)	18 (60.0%)	
Type of feeding	**BF**	20 (66.7%)	19 (63.3%)	0.78
	AF	10 (33.3%)	11 (36.7%)	

BF: Breast feeding; AF: Artificial feeding; NVD: normal vaginal delivery; CS: caesarean section

Table (2) Comparison between groups regarding total serum bilirubin and Vitamin D level

.

Parameter	Groups		P. value
	Group (I) Cases (n=30)	Group (II) Control (n=30)	
Total serum bilirubin (mg/dL)	18.75 ± 2.24	5.89 ± 1.52	0.01**
25 (OH) Vitamin D (ng/ml)	15.45 ± 4.51	26.36 ± 12.62	0.01**

P < 0.05 is significant; P < 0.001 is highly significant**

Table (3): Correlations between total serum bilirubin and 25 (OH) Vitamin D in cases and control groups.

Correlation	Cases group		Control group	
	(r)	P	(r)	P
Total serum bilirubin and 25 (OH) Vitamin D	-0.82	0.01**	-0.26	0.34

P < 0.05 is significant; P < 0.001 is highly significant**

Table (4): Different ranges of Serum 25 (OH) Vitamin D levels in cases and control groups

Serum 25 (OH) Vitamin D levels (ng/ml)		**Patients (N=30)**	**Controls (N=30)**
Severe deficiency < 5	**No. (%)**	0 (0%)	0 (0%)
Deficiency (5 - 14.9)	**No. (%)**	23 (76.6%)	5 (16.6%)
Insufficiency (15 – 20)	**No. (%)**	4 (13.3%)	9 (30%)
Normal (> 20)	**No. (%)**	3 (12%)	16 (53.4%)
P value		0.000**	

P < 0.05 is significant; P < 0.001 is highly significant**

Table (5): correlation between different ranges of serum levels of Vitamin D in neonates and their mothers in group I .

Serum Vitamin D levels (ng/ml)		Groups		
		Patients (N=30)	**Mothers of cases (N=30)**	**P value**
Sever deficiency <5	**NO**	**0**	**0**	0
	%	**0.0%**	**0.0%**	**0.0%**
Deficiency (5 - 14.9)	**No.**	23	15	0.03 *
	%	76.6%	50%	
Insufficiency (15 – 20)	**No.**	4	8	0.2
	%	13.3%	26.6%	
Normal (> 20)	**No.**	3	7	0.16
	%	12%	23.3%	

P < 0.05 is significant; P < 0.001 is highly significant**

Table (6): Correlation between maternal and neonatal serum 25 (OH) Vitamin D levels in cases group.

Correlation	Cases group	
	(r)	P value
Maternal and neonatal serum 25 (OH) Vitamin D levels	0.17	0.05

P < 0.05 is significant; P < 0.001 is highly significant**