

Table (1): Maternal illnesses among the studied preterms

Variable	Percentage (Total No=60)
Pregnancy induced hypertension	17 (28.3%)
Diabetes Mellitus	2 (3.3%)
Antenatal steroid administration	22 (36.7%)
History of PROM	20 (33.3%)

PROM= premature rupture of membranes

Table (2): The Demographic Characteristics among the studied Preterms

Total no. = 60		
Gender	Male	35 (58.3%)
	Female	25 (41.7%)
Mode of delivery	CS	41 (69.5%)
	NVD	18 (30.5%)
Gestational age (weeks)	Mean ± SD	31.1 ± 2.5
Birth weight (grams)	Mean ± SD	1515.07 ± 491.13
Apgar score 1 min	Median (IQR)	3 (2 – 4)
Apgar score 5 min	Median (IQR)	6 (5 – 7)
Apgar score 10 min	Median (IQR)	7 (6 – 8)

CS= Caesarean section; NVD= normal vaginal delivery

Table (3): Data of PRBCs transfusion among the studied Preterms

Total Number = 60	
Age at time of transfusion (days) median (IQR)	11 (6.5 – 16)
Cause of transfusion	Anemia of prematurity 54 (90.0%)
	ICH hemorrhage 4 (6.7%)
	External bleeding 1 (1.7%)
	Unknown Cause 1 (1.7%)
Amount (cc/kg) (mean ±SD)	15.17 ± 3.18
Duration of transfusion in hours (mean ±SD)	2.16 ± 0.41
Storage time of RBCs in days (mean± SD)	23.08 ± 4.36
Previous PRBCs transfusion	5 (8.3%)
Previous FFP transfusion	16 (26.6%)

ICH= intra-cranial hemorrhage; FFP= fresh frozen plasma, PRBCs= packed red blood cells

Table (4): Laboratory Indices before & after PRBCs transfusion

Parameter	Before PRBCs transfusion	After PRBCs transfusion
Hb% (mean ±SD)	8.82 ± 1.73	11.17 ± 1.85
Hct (mean ± SD)	26.35 ± 5.37	34.83 ± 5.39
CRP median (IQR)	26 (6 – 46)	59 (12 – 106)

Hb= Hemoglobin, Hct= hematocrit; CRP= C-reactive protein

Table (5): Feeding protocol in both groups

Feeding protocol		Group 1(NEC) No. = 13	Group 2(No NEC) No. = 47	P-value
Before	NPO	0 (0.0%)	16 (34.0%)	0.031
	Preterm formula	11 (84.6%)	19 (40.4%)	
	Term formula	1 (7.7%)	6 (12.8%)	
	EBM	1 (7.7%)	6 (12.8%)	
During	NPO	13(100.0%)	47 (100.0%)	-----
After PRBCs	NPO	0 (0.0%)	16 (34.0%)	0.031
	Preterm formula	11 (84.6%)	19 (40.4%)	
	Term formula	1 (7.7%)	6 (12.8%)	
	EBM	1 (7.7%)	6 (12.8%)	

NPO= nothing per oral; EBM= expressed breast milk; PRBCs=packed red blood cells

P-value > 0.05: Non-significant; P-value < 0.05: Significant; P-value < 0.01: Highly significant

Table (6): Volume of Feeds before and after PRBCs transfusion in both groups

Median (IQR)	Group 1(NEC) (No. = 13)	Group 2 (No NEC) (No. = 47)	P value
Volume of feed before transfusion (cc/kg)	5 (3 – 12)	5 (2 – 16)	0.909
Volume of feed after transfusion (cc/kg)	5 (4 – 14)	6 (3 – 16)	0.718

P-value > 0.05: Non-significant; P-value < 0.05: Significant; P-value < 0.01: Highly significant

Table (7): PRBCs data among both groups

Item		Group 1	Group 2	P-value
		NEC (n=13)	No NEC (n=47)	
Cause of transfusion	Anemia of prematurity	10 (76.9%)	44 (93.6%)	0.056
	ICH	3 (23.1%)	1 (2.1%)	
	External bleeding	0 (0.0%)	1 (2.1%)	
	Unknown cause	0 (0.0%)	1 (2.1%)	
Amount (cc/kg)	mean ± SD	16.15 ± 3.63	14.89 ± 3.04	0.209
Duration of transfusion (hours)	mean ± SD	2.08 ± 0.49	2.18 ± 0.38	0.419
Storage time of RBCs (days)	mean ± SD	21.83 ± 4.30	23.44 ± 4.36	0.266
Previous transfusion	No. (%)	1 (7.7%)	4 (8.5%)	0.925

ICH= intracranial hemorrhage

P-value > 0.05: Non-significant; P-value < 0.05: Significant; P-value < 0.01: Highly significant

Table (8): Univariate & multivariate logistic regression

Variable	B	S.E.	Wald	P-value	Odds ratio (OR)	95% C.I. for OR	
						Lower	Upper
Univariate logistic regression							
Apgar score at 10 min	1.875	0.847	4.900	0.027	0.153	0.029	0.807
Significant PDA	1.431	0.657	4.750	0.029	4.185	1.155	15.16
Multivariate logistic regression							
Apgar score at 10 min	1.697	0.888	3.650	0.056	0.183	0.032	1.045
Significant PDA	1.306	0.684	3.645	0.056	3.691	0.966	14.103