

Table 1A: Clinical and demographic data of cases and controls

Item		Control	Case	p-value
Gestational age in weeks	Mean± SD	31.15±1.14	30.77±1.41	0.211
	Median (IQR)	32(30:32)	31(30:32)	
Birth weight in grams	Mean± SD	1374.84±168.78	1262.56±216.7	0.004 **
	Median (IQR)	1370(1260:1480)	1300(1100:1450)	
Multiple Gestation	Mean± SD	0.31±0.53	0.45±0.7	0.294
	Median (IQR)	0(0:1)	0(0:1)	
Duration of Oxygen in days	Mean± SD	11.06±7.99	44.68±20.3	<0.001 **
	Median (IQR)	12(4:18)	38(32:47)	
CPAP Duration	Mean± SD	4.05±3.99	15.11±9.22	<0.001 **
	Median (IQR)	4(0:7)	14.5(11:18)	
Blender Duration	Mean± SD	3.11±2.57	8.18±4.43	<0.001 **
	Median (IQR)	3(1:5)	8.5(6:12)	
Mechanical Ventilation Duration	Mean± SD	4.73±2.57	24.18±22.67	<0.001 **
	Median (IQR)	4(3:7)	13(7:35)	
Head box Duration	Mean± SD	1.47±1.51	3.09±2.24	<0.001 **
	Median (IQR)	1(0:2)	3(1:5)	
Incubator Oxygen Duration	Mean± SD	1.63±1.66	2.91±2.15	<0.001 **
	Median (IQR)	1(1:2)	3(1.5:4)	
Total Parenteral Nutrition duration in days	Mean± SD	8.69±6.01	24.73±15.17	<0.001 **
	Median (IQR)	9.5(5:13)	22.5(12:40)	
Intake of Plasma	Mean± SD	0.84±1.36	4.07±4.24	<0.001 **
	Median (IQR)	0(0:1)	2.5(1:7)	
Maternal age	Mean± SD	27.16±4.87	25.5±4.87	0.087
	Median(IQR)	27(23:31)	24(22:30)	
Infectious episodes	Mean± SD	1.5±1.02	3.55±1.66	<0.001 **
	Median (IQR)	2(1:2)	3(2:5)	
Duration of caffeine citrate	Mean± SD	27±11.86	42.68±22.84	<0.001 **
	Median (IQR)	24(19:30)	37.5(23.5:54)	
Inotropes Duration in days	Mean± SD	6.69±4.27	17.25±8.23	<0.001 **
	Median (IQR)	5(4:9)	16(11:24)	
Intake of PRBCS	Mean± SD	1.6±1.17	2.67±1.8	<0.004 **
	Median (IQR)	1(1:2)	2(1:4)	
Inhaled Steroids Duration	Mean± SD	10.75±4.44	28.52±17.28	<0.001 **
	Median (IQR)	12(7:14)	23(14:38)	

*significant **highly significant

Table 1B: Continued Clinical and Demographic Data between cases and controls

Item	Controls=62 N(%)	Cases=44 N(%)	P value
Sex			
Female	30(48.3%)	23(52.3%)	0.691
Male	32(51.7%)	21(47.7%)	
CPAP	40(64.5%)	42(95.5%)	<0.001 **
Blender	49(79%)	39(88.6%)	0.149
MV	11(17.7)	28(63.6)	<0.001 **
Head Box	41(66.1)	35(79.5)	0.131
Incubator Oxygen	49(79)	37(84.1)	0.512
Early Onset Neonatal Sepsis	25(40.3)	25(56.8)	0.094
Late onset Neonatal Sepsis	43(69.4)	43(97.7)	<0.001 **
Patent Ductus Arteriosus	8(12.9)	28(63.6)	<0.001 **
Development of pneumothorax	0(0)	11(25)	<0.001 **
Necrotizing Enterocolitis	4(6.5)	23(52.3)	<0.001 **
Intake of Inhaled steroids	40(64.5)	42(95.5)	<0.001 **
Intake of Surfactant	5(8.1)	20(45.5)	<0.001 **
Total Parenteral Nutrition	48(77.4)	41(93.2)	0.029
Severity of ROP			
Absent ROP	33(53.2)	5(11.4)	<0.001 **
Low grade ROP	24(38.7)	32(72.7)	
Severe ROP	5(8.1)	7(15.9)	
Intraventricular hemorrhage	8(12.9)	18(40.9)	<0.001 **
Intake of Inotropes	15(24.2)	36(81.8)	<0.001 **
Intake of Inhaled steroids	40(64.5)	42(95.5)	<0.001 **

*significant **highly significant

Table 2A: Clinical and demographic data associating ROP cases

Item	ROP N(%)		P value
	Absent N=38	Present N=68	
Sex			
Female	19(50)	34(50)	0.316
Male	19(50)	34(50)	
Premature Rupture Of Membranes	8(21.1)	13(19.1)	0.694
Antenatal Steroid Use	8(21.1)	22(32.3)	0.257
Patent Ductus Arteriosus	8(21.1)	28(41.2)	0.036*
Necrotizing Enterocolitis	6(15.8)	21(30.9)	0.087
Intraventricular hemorrhage	5(13.2)	21(30.9)	0.042*
Development of pneumothorax	1(2.6)	10(14.7)	0.93
Early Onset Neonatal Sepsis	15(39.5)	35(51.5)	0.235
Late Onset Neonatal Sepsis	27(71.1)	59(86.8)	0.047*
CPAP	22(57.9)	60(88.2)	<0.001**
Oxygen blender	26(68.4)	62(91.2)	0.003**
Mechanical Ventilation	5(13.2)	34(50)	<0.001**
Head box	21(55.3)	55(80.9)	0.005**
Incubator Oxygen	26(68.4)	60(88.2)	0.012*
Total Parenteral Nutrition intake	30(78.9)	59(86.8)	0.293
Intake of BPD regimen	3(7.9)	31(45.6)	<0.001**
Intake of Inotropes	12(31.6)	39(57.4)	0.011*
Intake of RBC	20(52.6)	57(83.8)	<0.001**
Intake of plasma	16(42.1)	48(70.6)	0.004**
Intake of Inhaled steroids	22(57.9)	60(88.2)	<0.001**
Intake of Surfactant	3(7.9)	22(32.4)	0.004**

*significant **highly significant

Table 2B: Clinical and demographic data associating ROP cases

Item	ROP Absent	ROP Present	P value
	Median(IQR)	Median(IQR)	
Gestational age in weeks	32(31:32)	31(30:32)	0.108
Duration of admission in days	28.5(24:40)	43.5(32.5:59)	0.001**
Birth weight in grams	1355(1300:1500)	1300(1155:1450)	0.025*
Duration of oxygen in days	10(0:20)	30(17:43)	0.001**
CPAP duration	4(0:7)	11(4:16)	0.001**
Blender duration	3(0:6)	6(3:9)	0.001**
Mechanical ventilation duration	8(5:8)	19(9:37)	0.004**
Head box duration	1(0:2)	2(1:4)	0.002**
Incubator oxygen duration	1(0:2)	2(1:4)	0.019*
Infectious episodes	2(1:3)	2(2:4)	0.003**
Total parenteral nutrition duration	11(5:13)	14(8:28)	0.008**
BPD regimen duration	10(10:10)	10(6:27)	0.604
Duration of caffeine citrate	23(19:31)	28(23:44)	0.005**

*significant **highly significant

Table 3: Severity of BPD in relation to ROP

Item	Severity of ROP						P value
	Absent ROP		Low grade ROP		Severe ROP		
Severity of BPD	N	%	N	%	N	%	
Absent BPD	33	86.8	24	42.9	5	41.7	
p-value	<0.001		0.0005		0.194		
Mild	1	2.6	1	1.8	1	8.3	
p-value	0.689		0.920		0.617		0.002**
Moderate	4	10.5	16	28.6	4	33.3	
p-value	0.036		0.072		0.764		
Severe	0	0	15	26.8	2	16.7	
p-value	<0.001		0.012		0.134		

** Highly Significant;
Bonferroni adjusted p value= 0.000417

Table 4: Multiple regression analysis to detect the predictors of BPD

Item	B	p-value	OR	95% C.I. for OR	
				Lower	Upper
PDA	1.599	0.02*	4.949	1.289	19.001
Intake of Inotropes	1.785	0.008**	5.959	1.597	22.232
ROP	1.644	0.021*	5.177	1.279	20.949
Duration of admission in days	0.095	0.003**	1.1	1.034	1.17
Constant	-6.953	0	0.001		

*significant **highly significant

Variable(s) entered on step 1: Birth weight in grams, MV, Incubator oxygen, Late onset neonatal Sepsis, TPN, PDA, Intake of Inotropes, Intake of Surfactant, ROP, Duration of admission in days.

Table 5: Multiple regression analysis to detect the predictors of ROP

Item	B	p-value	OR	95% C.I. for OR	
				Lower	Upper
Mechanical Ventilation duration	1.672	0.004**	5.323	1.689	16.777
Duration of Oxygenation	1.555	0.012*	4.736	1.405	15.957
Duration of admission in days	0.043	0.009**	1.044	1.011	1.078
Constant	-2.857	0.001**	0.057		

*significant **highly significant

Variable(s) entered on step 1: Birth weight in grams, Mechanical Ventilation duration, Incubator Oxygen, Late onset neonatal Sepsis, TPN, PDA, Intake of Inotropes, Intake of Surfactant, Duration of admission in days.