

**Table (1): Comparisons between studied groups as regard demographic data.**

Item	CPAP							P-value
	Mask (n = 20)	Nasal (n = 20)		Naso-pharyngeal (n = 20)				
Sex	Male	8	40%	14	70%	12	60%	0.150 NS
	Female	12	60%	6	30%	8	40%	
Gestational age	34 weeks	12	60%	6	30%	12	60%	0.141 NS
	35 weeks	4	20%	8	40%	2	10%	
	36 weeks	4	20%	6	30%	6	30%	
Weight (kg)	Mean	2.23		2.24		2.17		0.966 NS
	±SD	0.38		0.44		0.34		
Duration (days)	Mean	4.4		4.8		4.2		0.423 NS
	±SD	1.05		1.44		1.20		

NS: p-value > 0.05 is considered non-significant.

CPAP: continuous positive airway pressure, Kg: kilogram, SD: standard deviation.

**Table (2): Comparisons between studied groups as regard level of PEEP.**

Item	CPAP							P-value
	Mask (n = 20)	Nasal (n = 20)		Naso-pharyngeal (n = 20)				
PEEP	(6)	8	40%	6	30%	12	60%	0.150 NS
CmH2O	(7)	1	60%	14	70%	8	40%	

NS: p-value > 0.05 is considered non-significant.

CPAP: continuous positive airway pressure, CmH2O: centimeter water

**Table (3): Comparisons between studied groups as regard ABG results.**

Item	CPAP			P-value	
	Mask (n = 20)	Nasal (n = 20)	Naso-pharyngeal (n = 20)		
pH	Mean	7.29	7.35	7.34	0.0051 NS
	±SD	0.10	0.11	0.12	
PCO <sub>2</sub>	Mean	35.5	44.7	44.0	0.007 S
	±SD	9.4	9.1	10.6	
HCO <sub>3</sub>	Mean	16.7	20.1	17.9	0.191 NS
	±SD	4.2	6.6	5.8	

S: p-value < 0.05 is considered significant. NS: p-value > 0.05 is considered non-significant.

CPAP: continuous positive airway pressure, ABG: arterial blood gases,

**Table (4): Comparisons between studied groups as regard response.**

Item	CPAP				P-value			
	Mask (n = 20)	Nasal (n = 20)	Naso-pharyngeal (n = 20)					
Response	Improved	8	40%	10	50%	12	60%	0.04 S
	MV	12	60%	10	50%	8	40%	

NS: p-value < 0.05 is considered significant.

CPAP: continuous positive airway pressure, MV: mechanical ventilation,

**Table (5): Comparisons between studied groups as regard complications.**

Item	CPAP							P-value
	Mask (n = 20)		Nasal (n = 20)		Naso-pharyngeal (n = 20)			
Complications	No	18	90%	2	10%	2	10%	< 0.001 HS
	Yes	2	10%	18	90%	18	90%	
Nasal irritation	No	18	90%	3	15%	20	100%	< 0.001 HS
	Yes	2	10%	17	85%	0	0%	
Problem fixation	No	3	15%	3	15%	20	100%	< 0.001 HS
	Yes	17	85%	17	85%	0	0%	

HS: p-value < 0.001 is considered highly significant.

CPAP: continuous positive airway pressure,

**Table (6): Description of response in all studied patients.**

Item	All studied patients (n = 60)	
Response	Improved	30 50%
	MV	30 50%

MV: mechanical ventilation,

**Table (7): Relation between response and other studied data in all studied patients.**

Item	Response				P-value	
	Improved (n = 30)		MV (n = 30)			
Sex	Male	18	60%	16	53.3%	0.602 NS
	Female	12	40%	14	46.7%	
Gestational age	34 weeks	8	26.7%	20	66.7%	0.006 S
	35 weeks	10	33.3%	6	20%	
	36 weeks	12	40%	4	13.3%	
Weight (kg)	Mean	2.3		2.1		0.214 NS
	±SD	0.4		0.3		
Duration (days)	Mean	4.0		4.9		0.003 S
	±SD	0.8		1.4		
pH	Mean	7.36		7.29		0.007 S
	±SD	0.11		0.1		
PCO2	Mean	42.1		40.7		0.591 NS
	±SD	7.2		13.0		
HCO3	Mean	19.7		16.7		0.039 S
	±SD	5.5		5.7		

S: p-value < 0.05 is considered significant. NS: p-value > 0.05 is considered non-significant.

MV: mechanical ventilation, PEEP: positive end expiratory pressure, kg: kilogram