

(Table 1) Outcome of studied populations

Variable	Summary statistics
Duration in NICU Mean \pm SD Median (range)	12.62 \pm 10.74 8 (3-45)
Duration on mechanical ventilation Mean \pm SD Median (range)	8.48 \pm 11.79 4 (0-45)
Duration on oxygen Mean \pm SD Median (range)	2.92 \pm 1.50 3 (0-7)

This table demonstrates the outcome of neonates with MAS and duration of admission in NICU , The median range of admission at NICU was 8 days, median range of mechanical ventilator was 4 days and median duration of oxygen therapy was 3 days.

(Table 2) Relation between MAS with and without sepsis and inflammatory indices

Variable	No sepsis	Sepsis	P value
CRP	24 (6-48)	48 (12-96)	<0.0001
PCT	10 (0.9-60.4)	25 (1.8-60)	0.001
ESR	7 (2-15)	15 (5-89)	<0.0001
WBCs	8000 (4000-18000)	19000 (10000-41000)	<0.0001
Neutrophilia (%)	39.3 (22.4-79.4)	73.8 (55-89)	<0.0001

Data was represented as median (range)

(Table 3) Prediction of Very Severe MAS with Inflammatory Indices

Variables	AUC	Cut-off	Sensitivity (%)	Specificity (%)	PPV (%)	NPV (%)	OR (95% CI interval)	P value
CRP	0.87 (0.74-0.95)	>24	83.3 (58.6–96.4)	78.12 (60.0–90.7)	68.2 (51.9–81.0)	89.3 (74.5–96.0)	17.9 (3.99–79.74)	<0.0001
PCT	0.91 (0.73-0.97)	>15	94.4 (72.7–99.9)	81.2 (63.6–92.8)	73.9 (57.7–85.5)	96.3 (79.3–99.4)	73.67 (8.13–667.2)	<0.0001
ESR	0.87 (0.75-0.95)	>8	88.9 (65.3–98.6)	68.7 (50.0–83.9)	61.5 (48.3–73.3)	91.7 (74.5–97.6)	17.6 (3.38–91.56)	0.001
WBCs	0.88 (0.75-0.95)	>1300	88.9 (65.3–98.6)	78.1 (60.0–90.7)	69.6 (53.8–81.8)	92.6 (77.0–97.9)	28.57 (5.26–155.17)	<0.0001
Neutrophilia (%)	0.86 (0.73-0.94)	>55	94.4 (72.7–99.9)	71.9 (53.3–86.3)	65.4 (51.8–76.9)	65.4 (51.8–76.9)	43.4 (5.0–376.3)	0.001
Any marker indicate MAS			100 (81.5–100)	43.75 (26.4-62.3)	50 (32.9–6.7)	100 (76.8–100)	Can't calculated	
All marker in dicte MAS			72.2 (46.5–90.3)	96.9 (84.8–99.9)	92.9 (66.1–99.8)	86.1 (70.5–95.3)	80.6 (8.6–759)	<0.0001

CI=confidence intervals. OR indicates the odds of very severe MAS comparing predictor values above and below the indicated cut-off

By analysis of values obtained during first 7 days of life, maximum CRP, and maximum PCT values were higher in neonates with very severe and severe MAS compared to non severe MAS. PCT and CRP correlated with duration of mechanical ventilation, duration of any respiratory support and length of hospital stay. PCT more sensitive rather than other inflammatory indices.