

Table 1: Comparison between different septic patients' groups

	sepsis	Septic shock	P-value
Age/month	23.37±25.23	15.67±28.38	0.02
Gender *			
Females	20 (52.63%)	17 (56.67%)	0.74
Males	18 (47.37%)	13 (43.33%)	
Diagnosis at admission *			0.78
GE	20	13	
Pneumonia	10	9	
Meningoencephalitis	4	3	
CHD and pneumonia	4	5	
Highest serum creatinine(mg/dl)	0.55±0.23	1.26±0.97	<0.0001
Estimated glomerular filtration rate(ml/min/1.73m ²)	82.32±29.13	46.15±32.89	<0.0001
NGAL(ng/ml)	96.66±11.53	105.14±6.11	0.005
Length of hospital stay(day)	12.45±5.55	9.13±5.14	0.002
PRISM III score	9.54±4.18	21±6.10	<0.0001
outcome *			<0.0001
Discharge	35 (92.11%)	10 (33.33%)	
dead	3 (7.89%)	20 (66.67%)	

Table (2) Multivariate regression analysis shows that septic shock is the only independent variable for elevation of serum NGAL (p=0.006)

Variables	Unadjusted regression co-efficient (95% CI)	P value	Adjusted regression co-efficient (95% CI)	P value
Age/month	-0.04 (-0.13:0.06)	0.42	-0.07 (-0.18:0.04)	0.22
gender	0.86 (-0.422:5.93)	0.74	0.12 (-4.94:5.18)	0.96
Highest serum creatinine	2.81 (-0.52:6.14)	0.10	2.64 (-3.59:8.89)	0.40
Estimated glomerular filtration rate	-0.05 (-0.12:0.03)	0.21	0.06 (-0.09:0.22)	0.40
Septic shock	8.50 (3.84-13.15)	0.001	10.40 (3.11:17.70)	0.006
Acute kidney injury	2.63 (-2.40:7.66)	0.30	1.22 (-7.52:9.96)	0.78
Low urine output	5.99 (-1.00:12.98)	0.10	-4.65 (-25.49:16.19)	0.66
hypervolemia	6.85 (-0.42:14.12)	0.07	15.13 (-9.94:40.20)	0.23
Pulmonary edema	11.37 (-3.34:26.09)	0.13	7.68 (-8.59:23.95)	0.35
Mechanical ventilation	3.76 (-1.41:8.92)	0.15	0.42 (-15.73:16.59)	0.96
Death	2.90 (-2.39:8.21)	0.28	-5.00 (-21.01:11.06)	0.54

Table 3: Clinical data of critically ill children (AKI patients vs. non- AKI patients).

	Non-AKI	AKI	P VALUE
Number	36(52.94%)	32(47.06%)	
AGE(month)	29.41±32.16	9.34±12.57	0.0001
Highest serum creatinine (mg/dl)	0.46±0.13	1.32±0.89	<0.0001
Estimated glomerular filtration rate(ml/min/1.73m ²)	93.63±23.28	35.68±16.90	<0.0001
NGAL(ng/ml)	99.17±11.23	101.80±9.29	0.30
Urine output *			
Normal	36 (100%)	22 (68.75%)	<0.0001
Low	0	10 (31.25%)	
Signs of Hypervolemia*			
No	36 (100%)	23 (71.88%)	0.001
Yes	0	9 (28.13%)	
PRISM III score	9.64±4.40	20.17±6.65	<0.0001
Length of stay (day)	12.33±5.5	9.47±5.35	0.007
Outcome*			
Good	33(91.67%)	12 (37.50%)	<0.0001
Dead	3 (8.33%)	20 (62.50%)	