

Table 1- clinical characteristics of participants

	RENAL N=27	PRERENAL N=53	HEALTHY N=20	ALL N=100	P value
Gender					
Boy	19(31%)	29(48%)	12(20%)	60(60%)	0.4
Girl	8(20%)	24(60%)	8(20%)	40(40%)	
Stage					
1	21(32%)	43(67%)	0	64(64%)	
2	6(40%)	9(60%)	0	15(15%)	<0.001
3	0	1(100%)	0	1(1%)	
Admission cause					
Sepsis	11(44%)	14(56%)	0	25(25%)	
Hypoxic encephalopathy	1(14%)	6(85%)	0	7(7%)	
Prematurity	3(50%)	3(50%)	0	6(6%)	
RDS	4(28%)	10(71%)	0	14(14%)	<0.001
Seizure	2(33)	4(66%)	0	6(6%)	
Metabolic assay	3(50%)	3(50%)	0	6(6%)	
Dehydration	0	3(100%)	0	3(3%)	
Surgery	3(23%)	10(76%)	0	13(13%)	

Icter	0	0	20(100%)	20(20%)
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Intubation

Yes	9(36%)	16(64%)	0	25(25%)	0.01
No			20	75(75%)	

CPR

Yes	6(40%)	9(60%)	0	15(15%)	0.09
No			20(23%)	85(85%)	

Table 2- Comparing the effect of different variables (one way ANOVA test)

	renal	Pre renal	Healthy	P value
Age (mean $\pm$ SD)	7.81 $\pm$ 3.8	7.8 $\pm$ 4.0	3.4 $\pm$ 0.9	<0.001
Gestational age (mean $\pm$ SD)	36.1 $\pm$ 4.0	36.3 $\pm$ 3.7	37.5 $\pm$ 1.5	0.34
Birth weight (mean $\pm$ SD)	2.6 $\pm$ 0.9	2.7 $\pm$ 0.8	2.9 $\pm$ 0.5	0.35
Apgar (mean $\pm$ SD)	8.6 $\pm$ 1.2	8.5 $\pm$ 1.4	9.0 $\pm$ 0.6	0.36
Serum creatinine (mean $\pm$ SD)	0.8 $\pm$ 0.2 ^b	0.8 $\pm$ 0.4 ^b	0.4 $\pm$ 0.08 ^a	<0.001
Urine SG (mean $\pm$ SD)	1009.7 $\pm$ 3.7 ^a	1014.1 $\pm$ 7.7 ^b	1009.3 $\pm$ 4.0 ^a	0.02
urine calprotectin (mean $\pm$ SD)	153.9 $\pm$ 34.2	138.5 $\pm$ 25.8	142.4 $\pm$ 34.4	0.10

*same alphabet demonstrates no statistical relation and different alphabet show meaningful difference.

Table 3- Comparing the effect of different variables (one way ANOVA test) in stages of AKI

	Stage3	Stage 2	Stage 1	P value
Gestational age (mean ± SD)	40±0	36.0±5.0	36.2±3.5	0.62
Birth weight (mean ± SD)	3.20±0	2.5±0.9	2.7±0.8	0.68
Apgar (mean ± SD)	9±0	8.8±1.01	8.5±1.4	0.78
Serum creatine (mean ± SD)	3.6 ± 0 ^b	1.01 ± 0.2 ^a	0.7 ± 0.1	<0.01
Urine SG (mean ± SD)	1030 ± 0 ^b	1017.6 ± 8.4 ^a	1011.2± 5.6	<0.01
Urine calprotectin (mean ± SD)	104±	151.6±45.9	142.5±24.3	0.22

Table 4 Comparison of urine calprotectin with standard definition of AKI

Gold standard (crt and u/o)					sensitivity	specificity	accuracy	PPV	NPV	Kappa	P value
		healthy	AKI	total							
Calprotectin	healthy	8	18	26	77.5%	40%	70%	83.7%	30.7%	0.15	0.11
	AKI	12	62	74							
	Total	20	80	100							