ONLINE APPENDIX

Supplemental Table 1: Univariate vs multiple logistic regression of clinical and biochemical data with mental status (alert vs altered) as dependent variable.

	Univariate Analysis		Multivariate Analysis	
	t-value	p-value	Odd ratio	p-value
pH	6.87	< 0.0001	15.89 - > 999.99	0.001
HCO_3	4.70	<0.0001	0.91 – 1.14	0.792
Glucose	-3.61	0.0004	0.99 – 1.00	0.711
BUN	-3.49	0.0007	0.97 – 1.01	0.304
WBC	-3.32	0.001	0.92 – 1.02	0.223
Creatinine	-3.07	0.003	0.74 – 1.24	0.755
Diastolic BP	2.28	0.023	0.96 – 1.02	0.468
Systolic BP	2.43	0.022	0.99 – 1.04	0.282
Osmolality	-2.07	0.041	0.97- 1.00	0.142

Supplemental Table 2: Sensitivity and Specificity (%) of pH and Osmolality as predictors of altered mentation in all 216 subjects:

Osmolality Quartile		pH Quartile			
		1	2	3	4
1	Sensitivity	19	51	75	88
	Specificity	98	87	65	32
2	Sensitivity	33	69	81	94
	Specificity	94	76	48	14
3	Sensitivity	41	71	86	100
	Specificity	93	69	39	6
4	Sensitivity	61	78	93	100
	Specificity	87	57	20	0

The first (lowest) quartile of pH and the fourth (highest) quartile of osmolality predicted depressed consciousness at presentation with 61% sensitivity and 87% specificity.

Supplemental Figure 1 Quartiles of pH and Osmolality as predictors of altered mentation in all 216 subjects.
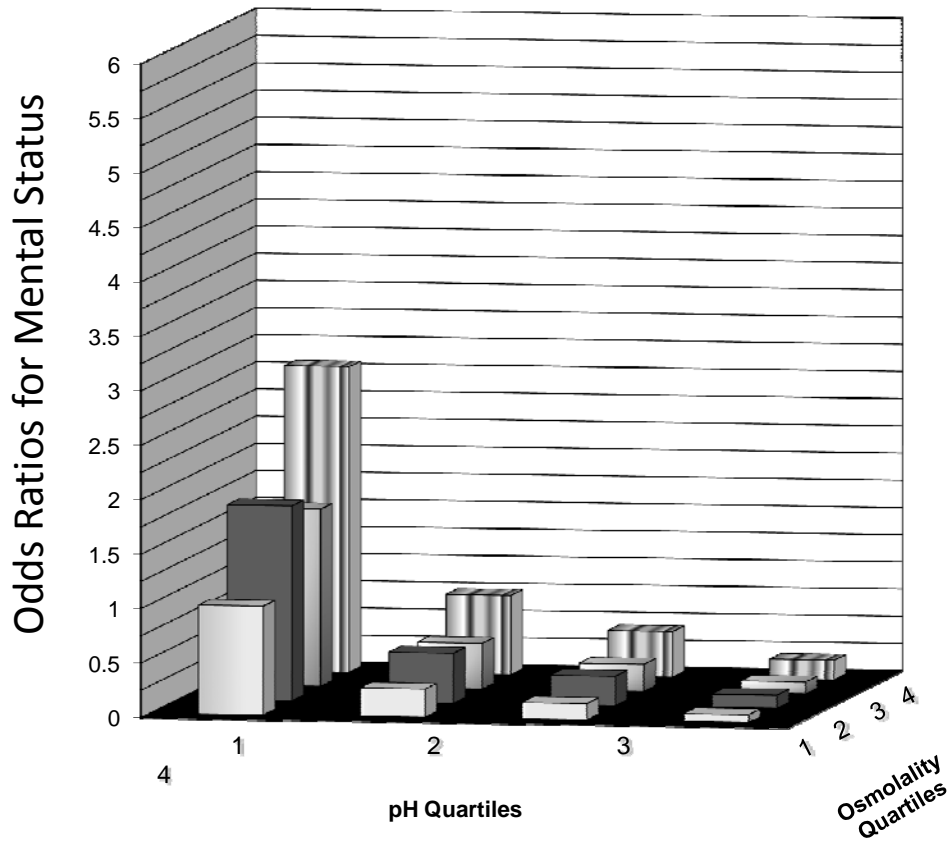
Supplemental Figure 2 ROC curve of odds ratio for presenting with altered mentation in all 216 subjects with pH and serum osmolarity as dependent variables.