

Table 1) Relationship between age, year, hospitalization season and time interval from consumption to referral to the hospital with mortality in the patients with acute methanol poisoning (The items in brackets are in percent)

variable	Consequences		Significance level
	Live person	Dead person	
age	31.8±12.8	39.89±13.03	<0.001
Hospitalization year			
2010	35(72.9)	13(27.1)	0.028
2011	15(69.6)	7(30.4)	
2012	24(88.6)	4(11.4)	
2013	12(92.9)	1(7.1)	
2014	30(77.6)	11(22.4)	
2015	26(100)	0	
Hospitalization season			
Spring	57(81.4)	13(18.6)	0.417
summer	51(87.9)	7(12.1)	
Autumn	23(76.7)	7(23.3)	
Winter	28(75.7)	9(24.3)	
Time interval from consumption to referral to the hospital	39.04±25.32	37.5±25.47	0.781

Table 2) Relationship of clinical conditions at the time of referral to the hospital and ECG changes with the mortality of patients with acute methanol poisoning (The items in brackets are in percent)

variable	Consequences		Significance level
	Live person	Dead person	
Coma			
Has	3(9.7)	28(90.3)	<0.001
Don't has	156(95.1)	8(4.9)	
Blurry vision			
Don't has	126(89.4)	15(10.6)	<0.001
Has	33(61.1)	21(38.9)	
Nausea and vomiting			
Has	39(95.1)	2(4.9)	0.0112
Don't has	120(77.9)	34(22.1)	
Pupil size			
Mydriatic	72(30.6)	30(29.4)	<0.001
Miotic	6(75)	2(25)	
Normal size	81(95.3)	4(4.7)	
QRS			
Normal	159(82.8)	33(17.2)	0.23
Unnormal	0	3(100)	
Qt			
Normal	151(81.2)	35(18.8)	1
Unnormal	8(88.9)	1(11.1)	
St			
Normal	134(83.2)	27(16.8)	1
Unnormal	25(73.5)	9(26.5)	
Sinus rhythm			
Has	156(83)	32(17)	0.007
Don't has	3(42.9)	4(57.1)	

Table 3) Relationship of laboratory results with the patients with acute methanol poisoning

Test	Live person	Dead person	Significance level
Urea (15-45mg/dl)	34.86±10.68-	60.08±54.56	<0.001
Creatinine (0.6-1.4mg/dl)	0.947±0.24	2.18±2.04	<0.001
AST (8-45IU/L)	30.27±25.94	13.05±185	<0.001
ALT (7-56IU/L)	29.09±30.27	94.57±151.3	<0.001
CPK (100-150IU/L)	314.5±397.4	6346.8±15391.1	<0.001
LDH (122-222IU/L)	565.68±1102.6	1775.29±1818.8	0.002
BS (70-110mg/dl)	141.52±68.12	2567.67±162.58	<0.001
Na (135-145meq/L)	140.07±3.92	141.32±7.23	0.592
K (3.6 -5meq/L)	4.26±0.97	4.66±1.41	0.289
pH (7.35-7.45)	7.23±0.17	6.91±0.26	<0.001
HCO ₃ (22-26meq/l)	10.56±8.21	5.28±3.03	<0.001
PCO ₂ (35-45mmHg)	21.63±10.2	24.49±13.71	0.483

Table 4) Relationship between the types of treatment with the rate of mortality in patients with acute methanol poisoning
(Items in brackets are in percent)

Types of treatment	Consequences		Significance level
	Live person	Dead person	
Ethanol			
Has	154(85.9)	24(14.1)	<0.001
Don't has	9(36)	12(48)	
folic acid			
Has	152(85.4)	26(14.6)	<0.001
Don't has	6(35.3)	10(58.8)	
Corticosteroid			
Has	150(84.7)	27(15.3)	0.001
Don't has	7(38.9)	9(50)	
Bicarbonate			
Has	150(85.2)	26(14.8)	<0.001
Don't has	9(47.4)	10(52.6)	

Dialysis	Consequences		Significance level
	Live person	Dead person	
Doing dialysis			
Has	142(86.9)	22(13.1)	<0.001
Don't has	16(57.6)	15(48.4)	
Frequency of dialysis			
0	16(51.6)	15(48.4)	<0.001
1	125(89.3)	10(10.7)	
2	17(85)	3(15)	
3	1(33.3)	1(66.7)	
5	0	1(100)	
Duration of dialysis	1.73±0.44	1.45±0.51	0.01

Table 6) Logistic regression of predictive factors for mortality in patients with acute methanol poisoning

Attribute	Beta coefficient	The standard error	Wald statistic	Significance level
coma	-6.76	2.45	7.58	0.006
Blurry vision	-3.08	2.57	1.44	0.23
Nausea and vomiting	10.38	65.88	0.025	0.875
Creatinine	9.06	4.46	4.12	0.042
BS	-0.01	0.007	2.14	0.143
ALT	0.05	0.029	3.59	0.058
constant number	-19.38	66.42	0.085	0.77

Table 7) Diagnostic value of creatinine in predicting patient mortality

Boundary limit	Sensitivity (percent)	Attribute (percent)	positive predictive value (percent)	Negative predictive value (percent)	Accuracy (percent)	Area under the curve	Significance level
1.3	61.1	91.2	62.9	90.6	85.3	0.762	<0.001
1.4	58.3	95.9	77.8	90.4	88.5	0.771	<0.001
1.5	44.4	98.6	88.9	88	88	0.715	<0.001

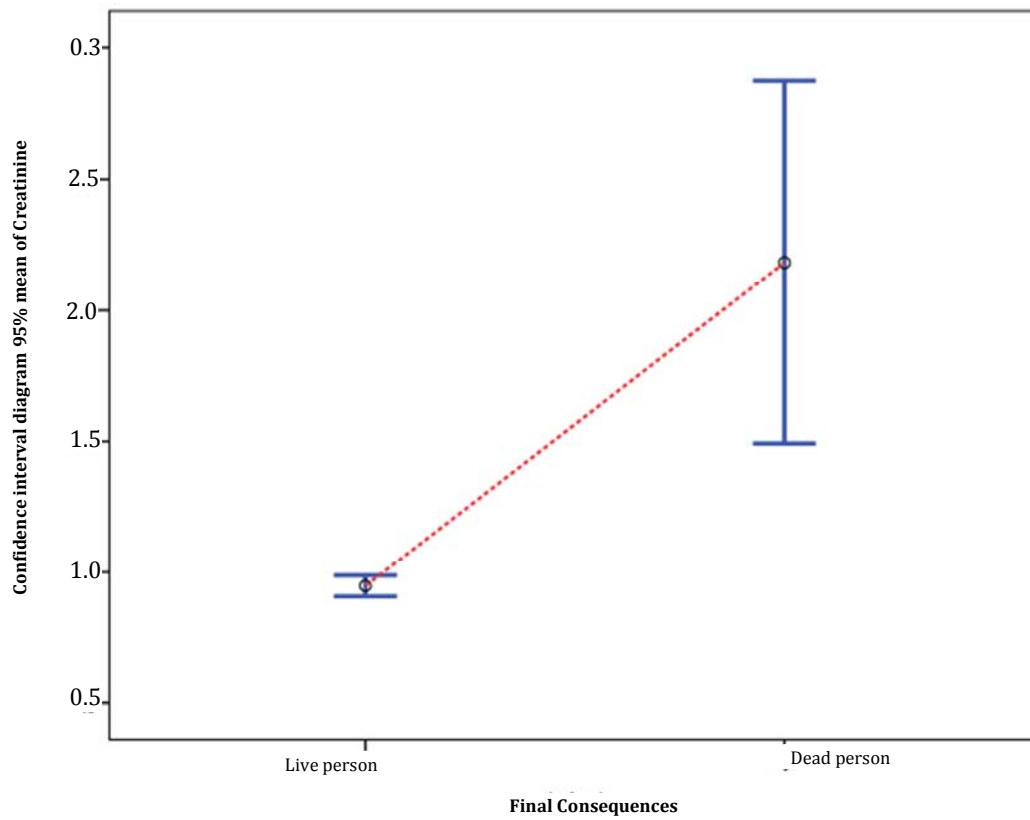


Diagram 1) Mean of creatinine level in patients with acute methanol poisoning in terms of mortality consequences

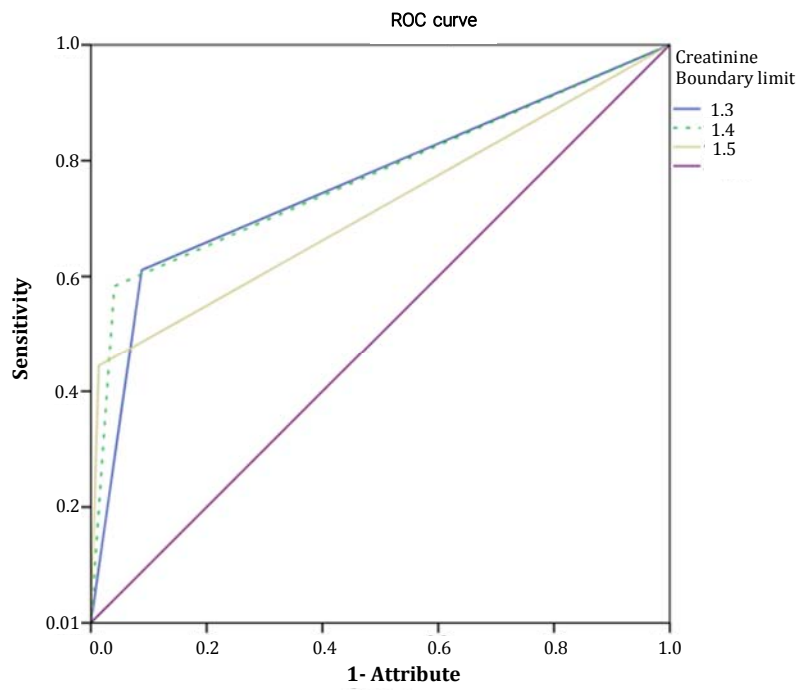


Diagram 2) ROC curve of creatinine level with boundary points of 1.3, 1.4 and 1.5 in predicting the mortality of patients