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### Intoxications of Methyl Alcohol in Emergency Department

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**Objective:** Methyl alcohol is a toxic raw material used in production of miscellaneous chemical substances. Even though methanol isn't toxic, its metabolites are toxic. Methanol intoxication can cause death by metabolic acidosis, brain damage, blindness and cardiovascular injury. In this study, we aimed to evaluate the demographic and clinical characteristics of patients who referred to emergency department with methyl alcohol intake.

**Methods:** Between April 1, 2016 and March 31, 2017, age, gender, complaints at arrival, clinical practices and hospital outcome of patients diagnosed with methyl alcohol intoxication at the emergency department were evaluated.

**Results:** 31 patients were included in the study. All of the patients were male (%100). Mean age was 55.8±11.6. When we evaluate the distribution of reasons for referral of patients, most frequent reason was blurred vision in 71% (n=22) of patients followed by nausea and vomiting in 12,9% (n=4), dyspnea and seizures in %6,5 (n=2) and cardiac arrest in 3,2% (n=1) of patients respectively. 83.9% (n=26) of patients had chronic alcohol intake. We found that 58.1% (n = 18) of the patients diagnosed with methanol intoxication had chronic diseases such as hypertension and coronary artery disease (19.4%), and diabetes mellitus (16.1%).

Bicarbonate treatment was applied in 87.1% (n=27), dialysis was performed in 83.9%, ethyl alcohol was applied in %58.1 (n=18) and folic acid treatment was applied in 48.4% (n=15) of the patients. All patients were followed up in the intensive care unit and 25.8% (n=8) of patients have died. It was observed that the pH and Glasgow Coma Score (GCS) of patients who have died were lower (p values were p=0.009 and p= 0.003, respectively) (Table 1).

**Conclusion:** It has been found that methanol intoxication is more frequent in males and those with chronic alcohol intake and may be mortal in patients with low pH and GCS values.

**Keywords:** Emergency department, intoxication, methyl alcohol

#### Value of the age, pH and GCS according to hospital outcome

	Discharged (n=23)	Death (n=8)	
	Mean±s.deviation	Mean±s.deviation	p
Age	55.70±12.96	56.25±7.32	0.910
pH	7.15±0.17	6.80±0.28	0.009
GCS	14.39±1.59	7.75±4.23	0.003