

Poster Abstracts

PO-21

CAN DURATION OF HEMODIALYSIS BE ESTIMATED BASED ON THE ON-ARRIVAL LAB TESTS AND CLINICAL MANIFESTATIONS IN METHANOL-POISONED PATIENTS?

Hosseini Hassanian-Moghaddam¹, Abdolkarim Pajoumand¹, Nasim Zamani¹, Shahin Shadnia¹

¹ Department of Clinical Toxicology, Loghman-Hakim Hospital, Shahid Beheshti University of Medical Sciences, Tehran, Iran

Objectives: We aimed to evaluate the efficacy of Lachance formula and more readily available clinical or laboratory factors (other than serum methanol level) in prediction of the needed time for hemodialysis in methanol-poisoned patients.

Methods: In a retrospective study, all methanol-poisoned patients referred to us between March 2008 and March 2016 were enrolled. The patients' demographic characteristics, on-arrival vital signs, signs/symptoms on presentation, and on-arrival lab tests were evaluated to find factors that could prognosticate the dialysis duration in these patients.

Results: Of 72 patients enrolled, 54 underwent hemodialysis once (group 1) and 18 needed more than one session of hemodialysis (group 2). Lachance formula overestimated the patients in higher methanol levels and underestimated them in lower methanol levels. It properly predicted the needed time for hemodialysis when the methanol level was between 15 and 25 mg/dL. Group 1 and 2 were different in terms of their ingested alcohol dose ($P=0.001$), creatinine ($P=0.02$), dyspnea on presentation ($P=0.002$), and the place they had been dialyzed ($P=0.013$). Dialysis duration significantly correlated with dyspnea on presentation ($P=0.028$) and ingested alcohol dose ($P=0.02$). After performance of logistic regression analysis, only creatinine was statistically significantly different between the two groups ($P=0.02$). Median creatinine levels were 1.3 [1, 6] (0.8- 2.7) and 1.4 [1.35, 2.1] (0.8- 6.5) in the patients who were dialyzed once and twice, respectively.

Conclusion: As a conclusion, creatinine is possibly a readily available test that can predict the appropriate time needed for hemodialysis in methanol-poisoned patients.