

The Turkish Journal of Occupational / Environmental Medicine and Safety

Vol:1, Issue Supplement 1 Web: http://www.turjoem.com ISSN: 2149-4711 Poster Presentation

P112. EVALUATION OF THE ETHANOL LEVEL BY DEMOGRAPHIC CHARACTERISTICS OF PATIENTS

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Ethanol is one of the most commonly abused toxic substances. Ethanol suppresses central nervous system. We aimed to investigate distribution of ethanol analysis in our hospital by age, sex, month and ethanol level.

Electronic database was searched between November 2013 and October 2014 retrospectively. 4249 patients (768 women, 3481 men) which were requested ethanol assay were enrolled in the study. Serum Ethanol was measured with Siemens ADVIA 1800 chemistry autoanalyzer.

In 1548 patients (36.4%) ethanol levels were detected >10 mg/dL (accepted positivity). 1216(78.6%) and 332(21.4%) of these patients were male and female respectively. Ethanol concentrations were 10-20 mg/dL, 20-50 mg/dL and >50 mg/dL in 26, 86 and 1104 of male patients, respectively. Ethanol concentrations were 10-20 mg/dL, 20-50 mg/dL and >50 mg/dL in 8, 14 and 310 of female patients, respectively. The age range of male patients ethanol detected were 0-18 (n=48, 4%), 19-25 (n=201, 16.5%) and over 25 years (n=967, 79.5%). The age range of female patients ethanol detected were 0-18 (n=34, 10.2%), 19-25 (n=49, 14.8%) and over 25 years (n=249, 75%). Among males, the highest mean level of ethanol was 213 mg/dL in April and the lowest mean was 160 mg/dL in August. Among females, the highest mean level of ethanol was 232 mg/dL in March and the lowest mean was 152 mg/dL in December.

Although male gender had a higher rate of accepted positivity for ethanol, mean ethanol levels in females were higher. In individuals under age 18, ethanol positivity were more frequent in females.