

## ≈ ORAL PRESENTATIONS ≈

OP 002

**Clinical and Biochemical Analysis of Acute Thinner Intoxication in Adults: A Retrospective Descriptive Study****Hossein Hassanian-Moghaddam**<sup>1</sup>, Hamid Reza Rahimi<sup>1, 2</sup>, Khosrow Agin<sup>1</sup>, Shahin Shadnia<sup>1</sup>

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**Abstract**

**Objectives:** Thinner contains a mixture of various aromatic hydrocarbons. A few studies have reported biochemical abnormalities and clinical symptoms of thinner intoxication among adult patients. We aimed to design a retrospective descriptive study to evaluate clinical and laboratory biochemistry abnormalities among adult patients.

**Methods:** Databases were obtained through questionnaires from thinner-intoxicated patients recruited at the Loghman-Hakim Hospital Poison Center between 2008 and 2013.

**Results:** Various clinical and paraclinical data from a total of 37 patients, 24 males (64.86 %) and 13 females (35.14 %) with the mean age of  $34.35 \pm 14.15$  SD years and mode of 22, was described and analyzed. Ages ranged between 15 and 70 years. Thinner toxicity happened through oral (N=33, 89.19 %), inhalation (N=3, 8.11 %) and injection (N=1, 2.70 %). The mean consumed dose was  $246.70 \pm 390.72$  mL with a mode of 60ml (range of 1 to 1500ml). Nausea, vomiting, asthma, sore throat, stomachache, drowsiness, dizziness, agitation, cough, and diarrhea were the most frequent clinical features, respectively. Tissue damage biomarkers detected the alkaline phosphatase (ALP,  $233.84 \pm 122.06$ ) and lactate dehydrogenase enzymes (LDH,  $749.33 \pm 471.03$  IU/L). They reflected development of liver and pulmonary toxicities. Arterial blood gas (ABG) shows acidosis without hypoxia occurrence in adult thinner-intoxicated patients.

**Conclusions:** Focusing on biochemical abnormalities and clinical toxicity symptoms are essential for screening organs involved in thinner intoxication. In addition, they provided good information for the clinical toxicologists to perform suitable conservative treatment in adult thinner-intoxicated patients.