



## LIDOCAINE POISONING: 40-CASE SERIES DURING A SEVEN-YEAR SURVEY

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**Objective:** The aim of this study was to determine demographic data, clinical and para-clinical findings, treatment and final outcome of lidocaine intoxicated cases in Loghman-Hakim hospital, Tehran, Iran.

**Methods:** We designed a data collecting form to extract the data of related cases since April 2007 to March 2014. Using ICD10 codes, we looked for any accidental or intentional poisoning with any form of lidocaine.

**Results:** During this period of time 40 patients with male predominance (65%) were admitted. Most of the cases (60%) were between 21-30 years old. The most common route of poisoning was oral (92.5%); local injection in 5% and one patient (2.5%) had intravenous injection.

The mean of ingested dose was  $405.8 \pm 309.7$  mg with the range of 10-1500 mg. The cause of poisoning is shown in table 1.

**Table 1: Distribution of patients due to cause of poisoning**

Cause of poisoning		Number of patients (%)
Suicidal		35 (87.5)
Accidental	Pain Relief	3 (7.5)
	Local Anesthesia	2 (5)
Total		40 (100)

In most of the cases (47.5%), the time between ingestion to admission in emergency department was 2 hours. The median systolic, diastolic blood pressure, pulse rate and respiratory rate was 110 mmHg, 70 mmHg, 84 beat/min. and 16/min, respectively.

The most common clinical manifestations were loss of consciousness (48%), nausea and vomiting (45%), abdominal pain (35%), seizure (28%) and dizziness (20%).

27% of the cases were admitted in grade IV of loss of consciousness, 5% in grade III and 15% in grade II based on Reed scaling.

In VBG evaluation, the median of pH, PCO<sub>2</sub> and HCO<sub>3</sub> subsequently were 7.35, 42.7 mmHg and 24.4 mEq/L.

Most of the cases underwent conservative care. 33% of the patients had been admitted in Medical Intensive Care Unit (MICU) and 25% of them were intubated. The mean length of stay in MICU was 5 days and in the ward, 1 day. The mortality rate was 9%. The remaining 91% discharged from the hospital without any morbidity.



**Conclusion:** The rate of suicidal cases by lidocaine are noticeable. The most common presentation was LOC. Supportive care was the main treatment in most cases.