

## ≈ ORAL PRESENTATIONS ≈

OP 005

**Stimulant Toxicity; A Growing Problem In Pediatric Toxicology**

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**Abstract**

**Objectives:** Acute metamphetamine (crystal meth) overdose is a common poisoning in Iranian adults. Availability of methamphetamine may affect accidental poisoning in children, as well. The aim of the current study is to evaluate epidemiological trend and characteristics of different stimulant overdoses in children.

**Methods:** Demographic data of all hospitalized children (younger than 12 years) with stimulant toxicity was gathered through chart review of hospital records.

**Results:** During five years (2007-2012), a total number of 148 cases of stimulant toxicity-predominantly males (58.8 %) - had been admitted to Loghman-Hakim Hospital (Tehran-Iran). Crystal methamphetamine (115, 78.4%), methylphenidate (24, 16.2%), ecstasy (3, 2%), and unknown substances (5, 3.4%) were the main stimulants. Mean age of the patients was 38±32 months (range 8-144 months) and the male/female ratio was 1.43. Stimulant toxicity increased constantly from 7 cases in 2007 to 41 cases in 2012. At the same time, crystal meth poisoning increased while other stimulant toxicities had variably fluctuated (p=0.011). Almost all poisonings had happened accidentally (79.7%) at residential properties (81%) and via oral route (80.4%) except for 12 cases (8.1%) of passive meth smoking and a case of active smoking (0.7%). Twenty-seven patients had become intoxicated after ingestion of the water the meth pipe had been put into. The route of consumption was undetermined in 16 (10.1%) cases. Fathers were the most sinners among all determined responsible persons (21 cases). Five (3.4%) children had the history of hospitalization due to the similar casue in the past. Agitation (132 cases, 89.2%), mydriatic pupils (101 cases, 68.2%), stereopyc

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movements (70 cases, 47.3%), talkativeness (51 cases, 34.5%), and nausea/vomiting (42 cases, 27.4%) were the most common signs and symptoms. Statistical analysis showed that the mean age of crystal meth toxicity was less in comparison to other stimulants (2.5 vs. 6 year,  $p < 0.001$ ). Also, most cases of toxicity had happened in winter.

**Conclusions:** Metamphetamine abuse is clearly increasing in our community. Innocent children are involved mainly through accidental poisoning after their parents' abuse in their living atmosphere. This child neglect condition may be decreased by social interventions.

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