



### Methamphetamine urine testing in children, early or late sampling?

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**Objective:** Methamphetamine intoxication is a new life threatening poisoning among children. Urine testing is considered a simple, cheap, fast and safe diagnostic tool with some false positive and false negative results. The purpose of this study was to determine the sensitivity of urine testing in children in the first 12 hours and in the subsequent 12-24 hours of methamphetamine poisoning

**Materials:** In this cross-sectional study, children poisoned with methamphetamine admitted to Loghman Hakim Hospital in Tehran from March 2014 to March 2015 were studied. For all patients, a rapid urine test was taken in the first 12 hours and then repeated in 12-24 hours post poisoning.

**Results:** There was a total of 22 patients, 60% (n = 13) were boys and 40% (n=9) were girls. The mean age was 28.3±11.64 months (range 11-48 months). All patients had been poisoned unintentionally and most of them were from ingestion. Common clinical manifestations included irritability and agitation (100%), tachycardia (95%), insomnia (90%), mydriasis (85%), repetitive movements (75%) and hallucinations (40%). In 91% (n=20) of cases the results of the rapid urine test was positive for methamphetamine within the first 12 hours after poisoning, but 12-24 hours post poisoning, the test was positive in 100% (n=22) of cases. The urine test was negative in one patient with inhalational exposure.

**Conclusion:** Urine testing can be used as an easy, fast and cheap method in the diagnosis of methamphetamine poisoning in children.