

Isopropyl alcohol intoxication following ingestion of multiple alcohol swabs in the inpatient setting.

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Background: Isopropyl alcohol (IA) has long been abused by alcohol dependent individuals as an inexpensive alternative to ethanol. Ingestions of IA often cause prolonged periods of intoxication, central nervous system depression, as well as ketosis without acidosis due to its acetone metabolite. We present the first case of IA intoxication following ingestion of isopropyl alcohol swabs.

Case Report: 32 yo female who was admitted to an inpatient psychiatric facility for alcohol abuse and depression presented to the Emergency Department (ED) with altered mental status after being found surrounded by "innumerable" empty alcohol swab wrappers. Her vital signs were Temp- 97.5°F, HR- 95bpm, BP- 91/69 mmHg, RR- 16 breaths/min, oxygen saturation - 99% on room air. On exam she appeared clinically intoxicated with slurred speech and was unable to provide any useful history. Laboratory analysis showed an osmolar gap of 38 mosm/kg. Serum ethanol was negative; urinalysis was positive for acetone; creatinine and calcium were within normal range. Her initial pH was 7.33, but quickly rose to 7.40 approximately three hours after intravenous hydration with normal saline and PO challenge. Upon further investigation, it became clear that all hand sanitizer solutions at the psychiatric facility were ethyl alcohol-based. She was hospitalized for 24 hours until her clinical intoxication resolved and was discharged back to the psychiatric facility on hospital day #2.

Case Discussion: Isopropyl alcohol intoxication is not an uncommon occurrence in the ED. Typically, patients acquire IA in the widely available 70-99% liquid formulation. In this case, our patient did not have access to another alcohol source that would account for her intoxication, osmolar gap, and laboratory findings. She utilized an item commonly found in any medical facility, and presented in a manner consistent with IA intoxication.

Conclusion: Isopropyl alcohol intoxication can be achieved via ingestion of multiple alcohol swabs, even in the inpatient setting. Measures should be taken to limit patient access to this potentially hazardous alcohol source.