Tetryzoline/alcohol interaction

CNS depression and vomiting: 2 case reports

Two women developed CNS depression and vomiting following administration of tetryzoline [tetrahydrozoline]; one of the women also ingested alcohol [dosages not stated].

A 19-year-old woman presented following a sexual assault. The previous evening, she was invited to the residence of a male subject, and consumed two drinks of vodka with cranberry juice. Within 15-20 minutes of ingesting half of the second drink, she felt light-headed, groggy, and lost consciousness. She subsequently experienced several periods of intermittent consciousness and vomiting. On the day of presentation she experienced two further episodes of spontaneous emesis and was drowsy. Gas chromatography/mass spectroscopy (GC/MS) of urine samples obtained 20 hours postingestion revealed a tetryzoline concentration of 114 ng/mL.

A 31-year-old woman presented following a sexual assault. She was confined in an apartment of a male subject for a week, during which the subject injected her with an unknown liquid or poured unknown powder over her face on several occasions. Following the injections, her heart rate accelerated, she lost consciousness and developed amnesia. After receiving the powder, she also lost consciousness and the concept of time. On the morning of presentation, she had a burning sensation on her face, and developed vomiting and body tremors. A witness subsequently took her to a hospital. GC/MS of urine revealed a tetryzoline concentration of 150 ng/mL, as well as marijuana metabolites, cocaine, benzoylecgonine, diphenhydramine, alprazolam, α -hydroxyalprazolam and citalopram.

Author comment: "Concomitant use of tetrahydrozoline with another CNS depressant (e.g., ethanol) may have potential additive effects, possibly decreasing the dose of tetrahydrozoline necessary for CNS depression."

Spiller HA, et al. Drug-facilitated sexual assault using tetrahydrozoline. Journal of Forensic Sciences 57: 835-8, No. 3, May 2012. Available from: URL: http://dx.doi.org/10.1111/j.1556-4029.2011.02026.x - USA 803078461