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toxtidbits

THE MARYLAND POISON CENTER'S MONTHLY UPDATE. NEWS. ADVANCES. INFORMATION.

Ibogaine

Ibogaine is an alkaloid with hallucinogenic properties that is obtained from the bark of the West African shrub *Tabernanthe iboga*. It is increasingly being used in non-medical settings in the United States and in other countries for the treatment of drug withdrawal and addiction, especially opioid addiction. It is illegal to possess or sell ibogaine (Schedule 1) in the United States; however, it is not regulated in some countries including Canada and Mexico. It is most commonly used in the form of ibogaine hydrochloride (95–98% pure), but ibogaine extracts and dried root bark (15-50% iboga alkaloid) are also administered. Although the pharmacology has yet to be fully explained, it has been proposed that ibogaine and its active metabolite noribogaine interacts with several different receptor types, including cholinergic, N-methyl-D-aspartate (NMDA), serotonin, kappa opioid and mu opioid receptors. Cases of severe cardiac effects and deaths due to ibogaine have been reported recently.

The onset of effects is within 1-3 hours after ibogaine ingestion. Toxic effects that have been reported include nausea, vomiting, hallucinations, anxiety, ataxia, seizures, bradycardia, hypotension, QTc interval prolongation, ventricular tachycardia, torsades de pointes and respiratory arrest. In several published cases and a recent case that the Maryland Poison Center was consulted on, the duration of adverse cardiac effects was prolonged for many hours to as long as nine days. Risk factors that have been identified in reported deaths include:

- preexisting cardiac disease
- concomitant use of opioids or other drugs (e.g. benzodiazepines, cocaine)
- seizures associated with alcohol or benzodiazepine withdrawal
- use of ibogaine extract or root bark instead of ibogaine hydrochloride
- ibogaine administered without close observation and monitoring by medical personnel

There is no specific treatment for ibogaine toxicity; treatment consists of activated charcoal for recent ingestions and supportive care. Ibogaine is not detected on routine toxicology screens.

Lisa Booze, PharmD, CSPI

Clin Toxicol 2012;50:654 Clin Toxicol 2012;50:157 J Forensic Sci 2012;57:398-412 Neth J Med 2012;70:422-424 NEJM 2009;360:308-309



Did you know?

Tapentadol (Nucynta®) may produce a false positive methadone urine test.

Tapentadol is a Schedule II controlled prescription analgesic that is a mu opioid receptor agonist and norepinephrine reuptake inhibitor. A recent study concluded that there is crossreactivity of tapentadol with methadone when the DRI methadone enzyme immunoassay is utilized. Clinicians should consider false-positive methadone results when interpreting urine drug screens in patients prescribed tapentadol. (J Analyt Toxicol 2012;36:582-587)

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