Did you know ……

There is a new street drug known as Flakka that has recently been in the news across the U.S. Flakka is a synthetic drug that can be swallowed, smoked, snorted, or injected. It may also be combined with other drugs such as marijuana.

Flakka typically contains the chemical alpha-PVP which is a synthetic version of the amphetamine-like stimulant cathinone. Symptoms seen include bizarre and uncontrollable behavior, hyperthermia, tachycardia, agitation, and psychosis.

Contact the IPCC at 1-800-222-1222 for guidance on managing cases involving Flakka.

Propylene Glycol

Propylene glycol (PG) is a colorless, nearly odorless viscous liquid that is considered to be very low in toxicity. The Food and Drug Administration has classified propylene glycol as an additive that is “generally recognized as safe” (GRAS) for use in food.

Propylene glycol has numerous common uses and may be found in:
- Anti-freeze, deicing fluids and lubricants used in the automotive industry
- Room deodorizers, all-purpose cleaners and disinfectants
- Pet foods and animal feeds
- Cosmetics and facial creams where it is used as an emollient
- Smoke and fog generators used in movies and dance clubs

Some intravenous medications use PG as a diluent. The two best known examples of this are phenytoin and lorazepam. However, PG is also used in the IV formulations of diazepam, digoxin, esmolol, etomidate, hydrocortisone, nitroglycerin, and phenobarbital. Healthy individuals receiving properly administered therapeutic doses of these medications are not expected to experience any adverse effects from the PG.

Symptoms of Propylene Glycol Toxicity

Symptoms are typically seen after deliberate ingestions or prolonged, high volume dosing of IV infusions containing PG, such as lorazepam. PG is metabolized to lactic acid and in large doses can cause an anion-gap lactic acidosis. Other signs and symptoms include hypoglycemia, CNS depression, hemolysis, seizures, and coma. Rapid administration of IV phenytoin has caused hypotension, bradycardia, increased QRS interval, increased T wave amplitude, transient ST elevations, ventricular dysrhythmias, and even death.

Treatment

Treatment is symptomatic and supportive. Alcohol dehydrogenase inhibitors (e.g. fomepizole, ethanol) are rarely indicated, except possibly in massive PG ingestions. Stop any drugs containing propylene glycol, and follow acid-base status, lactate level, and serum osmolarity. Hemodialysis is effective at removing PG from the blood and correcting acid-base abnormalities, but is rarely needed, usually only needed in cases of renal failure or severe metabolic acidosis not responding to supportive treatments.

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