

“Bath Salts”: A New Designer Drug

What comes to mind when you hear the words “bath salts”? Unfortunately, the term has taken on a darker and considerably more dangerous connotation. “Bath salts” is slang for a new over-the-counter drug of abuse that is making headlines throughout the country. Although the name may appear harmless, this new drug is anything but. Bath salts are now a leading cause of emergency room visits, hospital admissions, and calls to poison control centers.

Bath salts are a new designer stimulant containing substituted cathinones such as 3, 4 methylenedioxypyrovalerone (MDPV) or 4-methylmethcathinone (mephedrone). Both of these chemicals are related to an organic stimulant, khat, found in East African and Arabic countries. These drugs come in powder and crystal form and are packaged similarly to bath salts, although they have no legitimate use for bathing. The powder can be used rectally, smoked, injected, snorted, or ingested. Bath salts have been marketed in the United States under a variety of harmless-sounding names such as “Cloud 9,” “Blizzard,” “Ivory Wave,” “White Lightning,” and “Vanilla Sky.” These drugs, although now illegal, have been commonly found in gas stations, smoke shops, convenience stores, and on the Internet.

Symptoms and Treatment

Both mephedrone and MDPV are central nervous stimulants and produce effects similar to those of amphetamines, cocaine, and ecstasy (e.g., enhances state of alertness, euphoria, and intense stimulation, etc.). However, along with this pleasurable high comes troubling sympathetic hyperstimulation and psychiatric effects. The sympathetic effects include hyperthermia, tachycardia, hypertension, and seizures. The psychiatric effects present as visual hallucinations, paranoia, agitation, psychosis, and homicidal or suicidal thoughts. These substances have an onset of about 20 minutes when ingested orally and can last from two to four hours. When this drug is snorted or inhaled, the onset and peak occur much earlier. The effects from these substances can last up to ten days and are extremely dangerous.

Unfortunately, there is currently no antidote for bath salts overdose, and the best available treatment is supportive care. The treatment is dependent upon the patient’s presentation but typically involves fluids, benzodiazepines, and physical restraints. In addition, the patient’s blood pressure, body temperature, heart rate, creatine phosphokinase (CPK), and potassium should be closely monitored. Psychiatric monitoring is recommended until mental status returns to normal, as hallucinations can last for days.

Drug Enforcement Agency (DEA) Intervention

The DEA has worked diligently to limit the epidemic abuse of bath salts. As of September 8, 2011, the DEA utilized its emergency scheduling authority to temporarily control the common substances found in bath salts, methylenedioxypyrovalerone,

mephedrone, and methylone. Any product containing these substances will be illegal for at least one year until the DEA and the U.S. Department of Health and Human Services determine whether the substances should be permanently controlled.

Conclusion

Although bath salts are currently illegal in the United States, it is by no means certain that people will stop abusing these substances. Therefore, it is important for clinicians to be aware of the dangers associated with the misuse of these chemicals. In patients who present with sympathomimetic overdose symptoms, the abuse of bath salts (mephedrone or MDPV) should be considered. The substances are undetectable by routine drug screens and the clinical presentation can be indistinguishable from other stimulant overdoses.

References:

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