INTRODUCTION

Designer drugs are constantly evolving, with the NBOMe derivatives of the 2C class of phenethylamines recently emerging in the United States market. Cases of 2C-I-NBOMe toxicity have recently been reported in the literature. No reports to date describe the clinical effects 2C-C-NBOMe toxicity.

CASE REPORT

A 24-yr-old female was found to be tachycardic, tachypneic and with agitation and delirium after drinking wine, smoking marijuana and ingesting 5 blotter paper doses of what she thought was lysergic acid diethylamide (LSD) while at the Burning Man festival (Black Rock City, NV, US). She thought she was being attacked by invisible assailants. She was transported to her campsite to an on-site field hospital by emergency medical personnel, where she was treated with intravenous normal saline and 2 mg lorazepam with complete recovery within 10 hours. The following day she had amnesia to the events that had transpired and was otherwise asymptomatic. Seven other people had ingested single doses from the same blotter paper that evening, but none had similar adverse effects. No one had taken more than one dose. All users had received the drug for free from one supplier. A leftover drug sample was obtained from the supplying party who had obtained it directly from the producer and was under the impression that it was “25C,” telling the patient that the drug was not acid, but “like acid.”

Leftover blotter paper samples were analyzed using Agilent Liquid Chromatograph-Time-of-Flight Mass Spectrometer (LC1200-TOF/MS 6230). The primary compound detected was 2C-C-NBOMe, with a smaller amount of 2C-I-NBOMe also present. We obtained a formula match to a dichlorinated version of 2C-C-NBOMe, but were unable to confirm its presence due to lack of reference standards for that compound.

CONCLUSIONS

Utilizing LC-TOF/MS, 2C-C-NBOMe was detected in blotter paper samples ingested by a patient with tachycardia and agitated delirium who had complete recovery.

GLOBAL REPORTS

2C-C-NBOMe was first synthesized in Germany in 2003. Reports of its use first emerged in Poland, followed by New Zealand. Multiple online reports of use exist from unknown locations. A recent report from Hong Kong highlighted 2 cases. Our report from Black Rock City, Nevada is the first published case from the US. Many unpublished US reports from law enforcement led to the DEA Schedule 1 classification in 2013.

TIMELINE

The 2C class of psychedelic phenethylamines, including 2C-C, is synthesized by Alexander Sasha Shulgin in the 1970s. 2C-B becomes popular as a street drug in the 1990s. In 2003, R. Heim synthesizes 3 of the 2C NBOMe derivatives, including 2C-C-NBOMe. In 2006, the D. Nichols lab examines structure-activity relationships of 5HT2 agonists including 2C-H-NBOMe and 2C-I-NBOMe. It emerges on the internet and street markets in 2010. In 2012, 2C-C becomes Schedule I in the US. In 2013, 2C-C-NBOMe and related compounds become Schedule I in the US and Class A in the UK.