Cutting the Cheese

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Because drug dealers can be quite innovative when it comes to increasing appeal and use of their wares, there will always be new agents and combinations of old ones for toxicologists to tackle. The teen drug making the news in Texas is a combination of black tar heroin and crushed over-the-counter cold tablets, most commonly Tylenol PMTM, known on the street and in the schools as "cheese." Black tar heroin is sticky and must be cut with a powdery substance to be inhaled. Analysis of 15 cheese samples seized recently by the DEA in Dallas, Texas showed the average heroin content was 2% [1]. Cheese also contains on average 94–95% acetaminophen and 4–5% diphenydramine HCL.

The name is allegedly attributed to the parmesan cheese-type consistency of the mixture, but may also be related to the Spanish slang word for heroin, *chiva*. Some say the innocent-sounding name was coined to appeal to adolescents and downplay the danger and stigma of heroin. Also, called "starter heroin," cheese is popular among the Latino youth in Dallas, some as young as age 13. The drug may be smuggled in from Mexico and distributed by local drug gangs in the Dallas area, accounting for its use by this population. Although the precise number of cheese-related deaths is difficult to determine, at least 17 teens have died in Dallas County since 2005 as a result of cheese exposure based on positive post-mortem toxicologic assays for diphenhydramine and heroin [2].

There may be nothing particularly trendy or novel about cheese heroin, other than its name. Addiction medicine experts state that there is nothing new about cutting black tar heroin with powdered cold medicines such as crushed antihistamine tablets. A similar epidemic occurred in Plano, Texas 10 years ago and was attributed to *chiva*, a mixture of heroin and DorminTM, a sleep aid containing diphenhydramine. Cheese may fall short of

"designer drug" status, but there is concern that widespread media coverage may increase its popularity among young people looking for a "new high". Adding to its appeal is its affordability and ease of use. The tan powder mixture is sold for approximately \$2 per dose (\$10 per gram) and can easily be concealed in notebook paper and snorted with a straw or ball point pen, standard student supplies.

Confusion exists as to why acetaminophen levels have been non-detectable in these cases. It may either be that the levels of acetaminophen are low or that the heroin is mixed with a pure diphenhydramine product. Patients may develop a combination of anticholinergic and opiate toxidromes, and serum acetaminophen and liver chemistries should be done to assess the need for N-acetylcysteine, particularly in habitual users.

While the cheese craze is currently centered in Dallas, it will not take long for the word to spread among communicationsavvy youth. Toxicologists worldwide need to be aware of the potential for heroin toxicity, possibly presenting as a mixed toxidrome, in a younger population of drug users.

REFERENCES

- 1. The Drug Enforcement Administration Office of Forensic Sciences. "Followup: "Cheese" Heroin Adulterated with Diphenhydramine and Acetaminophen) Continuing in Dallas, Texas". *Microgram Bulletin*. Jun **2007**.
- 2. http://www.dea.gov/programs/forensicsci/microgram/mg0607/mg0607.pdf
- $3.\ http://www.erowid.org/chemicals/heroin/heroin_article 1\\.shtml$