Psychoactive effects of the spice, Nutmeg in an adolescent male: A case study

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Introduction

Mr. DB, a 14-year male presented to the Emergency Department of a rural hospital in Australia with dry mouth and a delirium like picture characterised by extreme agitation, confusion and disorientation.

He had a past diagnoses of Opposition Defiant Disorder (ODD) and polysubstance abuse (THC, ETOH etc). There was no relevant history of a recent major physical illness, infection, overdose, head injury or epilepsy. His physical examination was unremarkable and investigations (Full Blood Examination, Urine & Electrolytes, ECG, LFT, CT Scan of head, CXR etc), showed no abnormality. A Urine Drug Screen was not positive for any of the commonly used psychoactive substances including, THC, amphetamines, Benzodiazepines or hallucinogens.

On mini mental state examination, he displayed confusion and poor orientation to Time, Place and Person. His score was 24/30. At this stage, a detailed mental assessment was not possible, and he was transferred to the Adolescent Inpatient Unit. Over the next 2 days he was observed to be presenting with a fluctuating mental state and appeared to be responding to internal stimuli.

Management

He was put on a trial of a benzodiazepine (Lorazepam 1-2 mg PRN to a max of 6 mg in 24 hrs) and showed a significant improvement in his mental state.

When a formal mental state examination was undertaken the next day (whilst still in the inpatient unit), Mr. DB, reported that he had used 6 crushed Nutmegs on a daily basis for a couple of days (prior to his hospitalization). He also reported that, he had often done this in the past with his friends, for the euphoric effect or the 'highs'. He said that young people, especially in the rural Australian community, would often use Nutmeg when they could not afford other common psychoactive substances like cannabis or alcohol, as nutmeg was cheap and easily available in the supermarkets.

He was subsequently discharged back home after a stay of 4 days in the inpatient unit with a reduced PRN dose of Lorazepam. On follow-up 2 weeks later, he showed no further worsening of his mental state and Lorazepam was ceased completely. He continued to remain well, on review 3 months later.

Discussion

The nutmeg tree (*Myristica fragrans* Houtt. Family Myristicaceae) is found in the East Indies. The dried fruit yields the spice nutmeg.

The first documented case of poisoning was in 1576 and it has been used as a hallucinogen since the Crusades'.

College students in the U.S. in the 1960's experimented with using this common spice to get high. It was discovered at that time, that, nutmeg has the potential to cause full-blown hallucinatory experiences, such as those brought on by LSD or hashish.

Since 1967, the U.S. FDA has categorized nutmeg as a psychoactive drug. Because of its potential toxicity, it is also included in the FDA's poison database.

Nutmeg contains an active, psychoactive compound called '*myristicin*', belonging to the deliriant drug family. Effects can range from a mild high or 'stoned feeling' like THC to a full-blown experience with auditory and visual hallucinations and shifts in perception.

Young people today are learning about nutmeg on the Internet, where a Google search will lead to websites and videos that describe how to get high by ingesting the spice.

News agencies in more recent times in the U.S., report that teens are snorting, smoking, drinking and eating large amounts of nutmeg, a spice traditionally used for holiday baking, in an effort to get high.

There have been no studies to determine the long-term effects on humans of ingesting large quantities of nutmeg. Studies done with mice and rabbits indicate that damage may occur to the liver, brain and central nervous system.

What Can Parents Do?

Parents need to be educated about this substance and that kids who experiment with using nutmeg to get high are probably using other substances to produce the same feeling.

For a lot of young people, nutmeg is an introductory drug that leads to the use of other drugs. Signs to look for in kids who may be abusing nutmeg include withdrawing from the family, spending excessive amounts of time alone or out with friends, and frequent vomiting.

References:

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ePoster presented at the World Psychiatry Congress, Lisbon, PORTUGAL, 21 – 24th August 2019