

Nutmeg Poisoning—A Case Report*

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INTRODUCTION

The use of nutmeg dates back to the middle ages, since which time it has been used as an aromatic stimulant, carminative, narcotic, emmenagogue, and abortifacient [1]. These uses of nutmeg produced a small frequency of toxicities in the past; however, the present day abuse of nutmeg as an hallucinogenic agent has increased the incidence of toxicity.

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To date, very little information is available regarding the action of nutmeg. It is generally believed that the volatile myristicin fraction of nutmeg is responsible for the activity [2].

The principal effects of nutmeg, 5 gm or greater oral dosage, are characteristic in many respects to belladonna alkaloid toxicity, viz., flushing of the skin, tachycardia, salivary inhibition, and central excitation. An important differential sign is the miosis produced by nutmeg in contrast to the mydriasis produced by the belladonna alkaloids [3].

Other general signs and symptoms related to nutmeg toxicity are a burning epigastric pain, with or without vomiting, restlessness, giddiness along with psychotomimetic manifestations such as hallucinations (visual are common) with spatial and color distortions. The feelings of depersonalization and unreality are common [1].

The effects on the homeostasis of the autonomic nervous system are variable in that there is usually a slight rise in blood pressure, but a marked drop in blood pressure concomitant with cyanosis and shock has been noted. The clinical course may be severe, with shock, coma, and acidosis being the main features [1].

Symptoms usually appear within 3 to 6 hr following the ingestion of 1 to 3 whole nutmegs or 5 to 15 gm of the grated spice. The duration of action may extend to 9 hr; with excessive dosage, the duration may well extend beyond several days. Deaths have been attributed to nutmeg toxicity; nevertheless, as a rule, recovery is apparently complete within 24 hr [3].

CASE REPORT

A 21-year-old white male was admitted via the hospital emergency room; his chief complaint being vomiting with abdominal pain following the ingestion of nutmeg mixed in orange juice. The actual dosage was not certain since another companion also partook of the mixture. In this instance, the patient related that a can of McCormick's nutmeg (weight: 75 gm) was mixed in a quart of orange juice.

The patient's companion passed out completely and was previously "dumped off" at his home by another companion; his fate is not known.

After admittance to the hospital, the patient admitted that he and his companion had previously gone on nutmeg trips which resulted in psychogenic and psychedelic experiences.

The clinical evaluation of the patient, upon admittance to the emergency room, is as follows: The patient exhibited the appearance of a snarling dog. Upon being questioned, he would retract his head back

into his neck, tighten up his neck muscles, retract his tongue and bare his teeth. He was apparently hearing while in a semicomatose state, but he would not respond to questioning at this time.

Two hours after admission, the patient fell asleep for a 2-hr period. Upon awakening, he was terrified and asked if he were going to live or die. He had no pain at this time, but complained of being very, very dizzy. He was very apprehensive.

During the entire first day, the patient remained drowsy and restless. He responded slowly when spoken to.

On physical examination, his skin was normal and the pupils were round, equal, and reacted well to light and accommodation. The lungs were clear, no rales, or abnormal sounds. The patient exhibited generalized abdominal tenderness; peristalsis was audible, adequate, and apparently within normal limits.

The routine laboratory tests were normal with the exceptions that the urinary pH was 8.0 and the white blood count was 12,600. The chest X-ray revealed normal lung fields and cardiac silhouette. The cardiovascular evaluation revealed a regular heart rate of 144/min with blood pressure of 150/100 which 15 hr later, declined to 112/82.

The following morning (29 hr after admission) the patient was pleasant and cooperative. His only complaint at this time was numbness of the fingertips. That evening the patient complained of soreness of both sides of the neck. He continued to react well and was discharged the following day.

TREATMENT

Upon admission, the patient was placed on nasal oxygen, for vertigo, and was administered a trimethobenzamide suppository every 6 hr for the vomiting. Chlorpromazine, 25 mg every 4 hr, was prescribed for agitation. A liquid diet was given as tolerated.

DISCUSSION

The case report concerns a 21-year-old male who had previously ingested a nutmeg-orange juice mixture for its psychedelic effects. The patient exhibited the typical "vomiting and abdominal pain" response along with a peculiar "snarling dog" response. He did not exhibit the usual miosis.

The patient also complained of marked vertigo which could be attributed to alkalosis on the basis of frequent emesis. The patient's

excretion of urine basic in reaction also points to the possibility of alkalosis as an aftermath of protracted vomiting.

The emesis and the agitated state of the patient was effectively controlled by trimethobenzamide suppositories and chlorpromazine therapy.

The patient exhibited the usual cardiovascular response to nutmeg, viz., tachycardia and hypertension. The patient returned to apparent normalcy approximately 29 hr after admission, complaining only of some numbness in the fingertips and soreness of the neck muscles which is probably attributable to the "snarling dog" appearance assumed by the patient upon admittance to the hospital.

REFERENCES

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