

Prolonged & Severe Opioid Toxicity after Ingestion of Poppy Seed Tea

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Background

The severity and penetrance of the opioid epidemic has resulted in both widespread physician concern, as well as increased public awareness. Opioid substitutes are discussed with increased attention. The public's perceived safety of such opioid alternatives, however, may be misleading, and the scientific literature is lacking. This is a case report of a significant opiate overdose after consumption of poppy seeds purchased on the internet.

Methods

A 33yo man consumed a homemade poppy seed tea for symptoms of chronic anxiety. The tea was prepared mixing 2 lbs of poppy seeds with water and shaking vigorously for 10-15 minutes. Soon after ingestion of one half the mixture, the patient felt intoxicated. Aside from his daily medications of alprazolam, escitalopram and buspirone taken 12 hours prior, no other substances were ingested. The patient was found to be unarousable by his wife 10-12 hours after ingestion. EMS was called and naloxone was administered with complete reversal of sedation. He was transferred to the ED, observed for 5-6 hours and discharged home after receiving 1mg alprazolam. The patient reported a persistent feeling of intoxication during his ED stay prior to alprazolam administration. One hour after arrival home, he was found unarousable and cyanotic. EMS was called and naloxone was administered again with reversal of symptoms. In the ED, the patient had a normal mental status and normal vital signs. Urine drug screen was positive for opiates and benzodiazepines.

He was admitted to the ICU for observation. No further naloxone administration was required. The tea was tested with LC-MS/MS and was positive for morphine (1.09 mg/mL) and codeine (62.1 mcg/mL) only. No additional opioids, including fentanyl, methadone, hydrocodone and oxycodone were found.

Discussion

Poppy seeds are known to contain opiate alkaloids including morphine and codeine.

Although detectable serum morphine levels after poppy seed ingestion have been reported, a clinically significant opioid toxidrome has not been described. Given the current opioid epidemic, physicians should be aware of the public's use of alternative agents that may result in significant toxicity.

Conclusion

Poppy seed ingestion may result in significant opiate toxicity requiring naloxone reversal.