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## Case Report

## An Uncommon Presentation of Chronic Ecstasy Use -

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## INTRODUCTION

Ecstasy is a designer drug which has been commonly been used as a “rave” or a “party drug.” The active constituent of ecstasy is MDMA (3,4-Methylenedioxyamphetamine) [1]. It is commonly used as an “empathogen”[2] or “entactogen”[3] and has been noted to produce effects such as wakefulness, sense of energy, sexual arousal [4,5], extraversion, heightened sense of closeness to others and tolerance of their opinions [6,7].

Some of the important adverse effects include jaw clenching, tooth grinding and movement of legs [8,9]. It may also cause restlessness, flight of ideas and elevated body temperature. On rare occasions, it has also been known to cause visual hallucinations, dissociation, bizarre behavior [10,11] and the observed effect in our case report- Agitation [12].

## CASE SUMMARY

Mr. C is a 22-year-old man who was brought in to the CPEP (Comprehensive Psychiatry Emergency Program) by EMS (Emergency Medical Services) and the police, because he was threatening family members with a knife at home after consuming Ecstasy. Patient had no past psychiatric hospitalizations. He had a remote history of being diagnosed with ADHD (Attention-Deficit Hyperactivity Disorder) as a child and had been on atomoxetine and guanfacine.

According to the patient, he was consuming ecstasy two doses every day for the last one year and had been developing increased levels of agitation. As per his mother, at home, the patient had become increasingly paranoid and was exhibiting erratic behavior, including verbal and physical aggression towards her.

On evaluation, patient had an emaciated appearance, was unkempt and had an intense stare. He exhibited rapid speech and labile affect. He walked out of the initial interview exploding and screaming, “I need to get out of here or you’ll see.” He would be fidgeting periodically during the interview process, pace during the interview, and would be seen on the unit constantly pacing the halls. Urine toxicology was positive for amphetamines and cannabis. His CPK (Creatine Phosphokinase) level was 3966. As per the patient, he was also not drinking adequate fluids.

After transfer to the inpatient unit, the patient continued to be labile and aggressive towards peers. He would initiate interactions with staff in a friendly manner while requesting discharge. However, when he would be informed about the need for further observation, he would become agitated, bang the telephone and the nursing station windows and threaten staff with dire consequences such as “I’ll see you outside” and “I’m going to get you.” He required emergent medications multiple times and had to be placed on precautions for violence on multiple occasions as well.

On day 6 of admission, his CPK increased to 5850 and he was transferred to the ED (Emergency Department) where he was admitted to the medical floor on 1:1 observation. On the medical floor he would pull out his IV lock and become agitated. Patient returned to the psychiatry unit after IV rehydration once his CPK had trended below 5000.

On the day he returned to inpatient psychiatry he had to be transferred back to the ED due to fever and tachycardia (pulse-138/minute). He was readmitted to medicine and was started on

intravenous antibiotics and fluids. On day 3 of readmission, patient eloped. Police were notified about patient’s disappearance. The team treating him reached out to his mother. She was not aware of his whereabouts. The team reached out to his grandmother and girlfriend and informed them of his elopement. The patient was not found.

## DISCUSSION

This case is an interesting study for multiple reasons. Agitation and psychotic behavior as the presenting feature for ecstasy use is uncommon [13]. It may be important to consider this presentation when evaluating patients with ecstasy related substance use disorder.

Secondly, the case presented a unique challenge in terms of the management of agitation in an emaciated patient who was not responding to medication alone. The patient developed elevated CPK and continued to be agitated to the extent of requiring intramuscular antipsychotics and benzodiazepines as well as restraints. The case invokes thought of developing a treatment protocol for agitation management in patients with elevated CPK. There is little published evidence at this time related to this condition. Management of agitation for such patients may be an area worth researching especially with the risks associated with neuroleptic malignant syndrome and rhabdomyolysis [14,15].

One possible protocol may be to ensure adequate prophylactic intravenous hydration if patient is excessively agitated [16]. A room in the psychiatry unit with trained healthcare personnel may be established where patients may receive certain treatments such as iv fluids or iv antibiotics [17].

Another unique challenge of the case was the patient elopement which occurred from the medical floor. Medical floors may not always have the necessary elopement prevention measures in place to stop agitated patients from eloping despite a 1:1 observation. As mentioned above, management of common complications may be established on the psychiatry unit.

These steps may help contribute to reduce elopement of psychiatrically unstable patients from medical units as well as reduce the workload burden on the medical units. A collaborative model of care with comprehensive management of psychiatric symptoms and co-morbid medical conditions and complications of psychotropic medications may lead to a more efficacious care model.

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