

Suicide Attempt with Mad Honey: Case Report

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Date of receipt / Geliş tarihi: August 19, 2015 / 19 Ağustos, 2015

Date of acceptance / Kabul tarihi: September 27, 2015 / 27 Eylül 2015



Dear Editor,

Attempted suicide is a person's deliberately undertaken action intended to be fatal that does not result in death. The reported lifetime incidence of attempted suicide is 4.6% (1). For both sexes, the most common method for suicide is drug use. On the following ranks for women are ingestion of rat poison, wrist-slashing, jumping from heights, hanging oneself, and inhaling natural gas from a bottle or from the mains; for men, the ranking is wrist-slashing, ingestion of rat poison, hanging, and jumping from heights. While suicide attempts are found more commonly in women, the number of deaths through suicide is three times higher in men (2). Assessing the risk of suicide attempts for type and violence of the action, men are in a higher risk group. In this communication, we want to present the case of a man trying to commit suicide using mad honey and explain its clinical characteristics.

Our case was a 19-year-old male, single, high school graduate admitted to the cardiology clinic. It was learned that the patient had been taken to emergency by a relative because of fluctuation of consciousness, vertigo, nausea, vomiting, and shortness of breath. Upon admission, the patient's blood pressure was 60/40mmHg, peak heart rate 36/min and blood sugar 90mg/dl. Full blood count and blood biochemistry

were normal, as was the electrocardiogram, except for sinus bradycardia. When preparing admission to the cardiological intensive care unit to follow up for symptomatic bradycardia and hypotension, it was assumed that the reason for the patient's poor general condition might be the use of a synthetic narcotic (bonsai). After follow-up and supportive treatment, the patient's cardiological state stabilized. He was then referred to us with a suspicion of psychoactive substance use. In the examination, the patient was conscious, cooperation and orientation intact, associations articulated and purposeful. His affect was depressive and distressed. At the beginning of the interview, he was seen to be unwilling to engage in contact. He gave short and defensive answers to our questions. During the course of the consultation, the patient cried and said "I only wanted to end my troubles". He explained that his family lived in Erzurum, he had come to Izmir to earn money and had worked temporarily on construction sites; recently, he had had problems with his girlfriend. During his life, he had only once used cannabis. Apart from that, there was no history of substance use. In the anamnesis received from him, it was learned that he had ingested five spoonfuls of mad honey with suicidal intention. When attempting suicide, he had believed that this was the easiest way to end his life. He had brought the mad

honey from his hometown as an alternative remedy and occasionally used one teaspoonful, especially for stomach ache and palpitation. He knew that taking more than one spoonful of this honey could lead to honey poisoning or even death. With the patient's consent, his relatives were informed of his situation. He was started on antidepressant to reduce depressive symptoms.

In Turkey, and particularly in the Black Sea region, honey produced by bees fed on *Rhododendron luteum* and *Rhododendron ponticum* flowers is popularly known as "mad honey" and used as an alternative remedy. The flowers of *Rhododendron* species contain grayanotoxins that are responsible for the poisoning, and these toxins are found abundantly in honey produced from these flowers. Responsible for the cardiac effects of mad honey poisoning is grayanotoxin-I, also known as andromedotoxin. Honey containing grayanotoxin loses its toxicity after a long period of time. Poisoning caused by mad honey can develop even after consumption of a small quantity. The exact dose for poisoning is not known, but it has been reported that the effect can start from the ingestion of 1 spoon (15g) of honey (3).

Depending on the ingested quantity, the presentation of poisoning includes strong salivation, sweating, gastrointestinal symptoms, hypotension, and cardiac arrhythmia. Gastrointestinal symptoms

generally manifest as nausea and vomiting. High doses may cause potentially fatal states with fluctuation of consciousness, strong hypotension, respiratory problems, bradycardia, and atrioventricular block (4). In cases of mad honey poisoning, rapid intervention is important. To address alarming symptoms, cardiac monitoring and supportive treatment are sufficient to improve the symptoms. In general, patients show fast clinical improvement after saline infusion and intravenous atropine administration. In rare cases, cardiac life support protocols may be necessary to treat the bradycardia. If the patient is agitated, 25-50mg chlorpromazine i.m. can be used (5).

In the literature search, we found a large number of case reports regarding mad honey poisoning. A significant proportion of those reports originated from Turkey. It appears that most cases of mad honey poisoning come about by accident or unknowing consumption (6). What makes our case interesting is that there has been no publication in the literature describing the use of mad honey with suicidal intention. However, we need to keep in mind that an individual after committing a suicide attempt may not accept the action or present the event as an unimportant accident. Therefore, in cases of mad honey poisoning it is important to consider the possibility of a suicidal act and to assess the case clinically regarding potential suicidality.

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