

Honey Intoxication: A Unique Cause of Sudden Cardiac Collapse

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Abstract : Introduction: The honey produced by the bees fed on Rhododendron species containing grayanotoxin is known as mad honey. Grayanotoxin is found in honey obtained from the nectar of Rhododendron species growing on the mountains of the Black Sea region of Turkey and also in Japan, Nepal, Brazil, parts of North America, and Europe. Although the incidence of grayanotoxin poisoning is rare, there is concern that the number of cases per year will rise with the increasing demand for organic products. Mad honey intoxication might present with mild symptoms of cardiovascular, gastrointestinal and neurological systems or might also present with a life-threatening form with AV block and cardiovascular collapse. In this article, we describe the summary of five cases, which came to our hospital with mad honey related cardiac complications. Findings: In last one year, five cases presented in the emergency department with sudden onset of Loss of consciousness, dizziness, shortness of breath. They felt difficulty after the consumption of 1-3 teaspoonful of wild honey. The honey was brought from most of the rural parts of Nepal like khotang. Some of them also came with vomiting, dizziness, and loose stool. On examination, most of them had severe bradycardia and low blood pressure. No abnormalities were detected on systemic examinations. In one patient, ECG and cardiac enzymes showed features of the acute coronary syndrome, but his treadmill test done few days later was normal. All patients were managed with inj. Atropine, I/V normal saline, and other supportive measures and discharged in a stable condition within one or two days. Conclusions: Rhododendrons is the national flower of Nepal. The specific species of rhododendron found in Nepal which contains the toxin is not known. Bees feeding on these rhododendrons are known to transfer the grayanotoxin to the honey they produce. Most symptoms are mild and resolve themselves without medical intervention. Signs and symptoms of grayanotoxin poisoning rarely last more than 24 hours and are usually not fatal. Some signs of mad honey poisoning include Bradycardia, Cardiac arrhythmia, Hypotension, Nausea and Vomiting. They respond to close monitoring and appropriate supportive treatment. Normally, patients recover completely with no residual damage to the heart or its conduction system.

Keywords : rhododendron, honey, grayanotoxin, bradycardia

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