An Interesting Case: An unusual cause of coma in a toddler

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A 14-month-old previously healthy boy presented to a community hospital after a sudden decrease in consciousness. Parents saw him “space out” then roll his eyes back and become floppy. Assuming these were seizures, he was given benzodiazepines at the referral ER and transferred to our paediatric centre.

Parents denied any possible ingestions. Physical exam revealed a GCS of 8 (E1, V2, M5), bilateral mydriasis, and decreased tone in all limbs. A head CT was normal. Routine chemistries and a septic workup revealed no abnormalities.

This child was transferred to PICU for management of either a postictal state or an unknown ingestion. He maintained his airway and breathing but at 9 hours after presentation, he suddenly developed irregular respirations, then bradycardia to 40 /minute. After two minutes of chest compressions the patient was breathing regularly again, with a heart rate of 70. He cried loudly when stimulated. Shortly after this event, his urinary toxicology screen was revealed to be positive for cannabinoids and benzodiazepines. He was started on nasal CPAP to provide respiratory stimulation. He had no further episodes of respiratory irregularity or bradycardia. CPAP was discontinued several hours later when he was awake and responsive. The patient continued to recover uneventfully and was discharged two days later.

Child and Family Services assessed the patient’s home and found a strong smell of cannabis. The patient was apprehended. It was not determined how the patient might have ingested cannabis.

The differential diagnosis of coma in a toddler can be extensive. A thorough history, and physical as well as appropriate laboratory investigations are often necessary. We present a coma due to toxic ingestion and highlight the need for appropriate monitoring and intervention. Cannabis is not a common ingestion in toddlers. While case reports have described toxic cannabis ingestions, none reported the need for cardiopulmonary resuscitation for severe bradycardia. Appropriate monitoring was essential to detecting and intervening for this problem in a timely fashion.

Learning points:

- Consider cannabis in the differential diagnosis of seizures or toxic ingestion.
- Management is supportive, but it is important to appreciate the risk of acute respiratory compromise and to monitor accordingly.
- Involve child care agencies early to aid in assessing the home and to ensure the child is discharged to a safe environment.