Don’t dismiss a ‘summer tan’ : Primary adrenal insufficiency disguised as cannabis hyperemesis

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Introduction

Incidence of cannabis hyperemesis syndrome (CHS) is on a rise. We present a case of episodic nausea and vomiting initially attributed to CHS later diagnosed with primary adrenal insufficiency (PAI).

Presenting History

24 year old male with history of cannabis use presented with intractable nausea and vomiting. He reported daily cannabis use and partial relief of symptoms with hot showers. He had multiple prior ER visits for similar complaints and was discharged with presumed diagnosis of CHS.

Physical Exam

Vitals: BP – 96/66 mm Hg, P : 94bpm, RR – 16/min, T – 97.9 F. **Diffuse skin hyperpigmentation which patient referred to as summer tan** and **peri-umbilical tenderness. Oral mucus membranes dry. Reduced skin turgor.**

Work Up and Management

CMP	Value
Sodium	**125 mmol/L**
Potassium	4.4 mmol/L
Chloride	93 mmol/L
Bicarbonate	**17 mmol/L**
Anion Gap	**15**
Creatinine	**2.19 mg/dL**
BUN	**36 mg/dL**
GFR	**37 mL/min/1.73m^2**
Glucose	87 mg/dL
Alk Phos	89 U/L
T Bil	0.8 mg/ dL
AST	**74 U/L**
ALT	**46 U/L**
D Bil	0.4 mg/dL

CBC	Value
Hemoglobin	15.9
WBC	**16.06**
Platelets	303

Serum Osm	266

Urine	Value
Osmolality	**266**
Sodium	**120**

Clinically hypovolemic along with salt wasting noted in urine.

Adrenal Insufficiency work up	Values
AM Cortisol	**0.5mcg/dL**
ACTH levels	**1525 pg/ml**
Cosyntropin stimulation test	**No response**

CT scan of abdomen and pelvis showed no acute inflammatory/obstructive process and normal adrenal glands.

Positive anti-21 hydroxylase antibodies and anti-adrenal antibodies (1:40).

Diagnosed with Primary adrenal insufficiency Secondary to autoimmune adrenalitis.

Started on Fludrocortisone and Hydrocortisone

Improvement of symptoms and resolution of hyponatremia

Conclusions

This case highlights importance of recognizing diagnosis biases such as anchoring bias and considering broader differentials when faced with patient with recurring symptoms. Our patient had recurrent nausea and vomiting which had been attributed to his cannabis use, however notable diffuse hyperpigmentation and urine studies raised concern for possible adrenal insufficiency, which was later diagnosed.

Hence forth, in cases with recurrent nausea and vomiting, causes such as adrenal insufficiency should be considered under the right clinical context prior to diagnosis CHS, even in the setting of excessive cannabis use.

After supplementation of glucocorticoids, our patient experienced significant and near-immediate relief of his symptoms.

Disclosure information

The authors have no relevant disclosures.