

SYNTHETIC/ CANNABINOID HYPEREMESIS

Renee Barrett
RN Nelson ED
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Case study:



Case study: Overview

27 year old Male

Multiple presentations with Abdominal pain & Vomiting

14 presentations to ED over 2 years

Past history of Depression, Overdose, Anxiety and Agitation

Poor social situation

Cannabis use since 11 years old

Herbal Highs for 2 years

Cannabinoid Hyperemesis

Chronic cannabis consumption.

Cyclical vomiting

Abdominal pain

Compulsive bathing in hot water



Modified Criteria for Cannabinoid Hyperemesis

Hot showers or bathing
relief



Major component to symptom relief

Epigastric or peri-umbilical abdominal pain

Age < 50

Weight loss of < 5kgs

Symptoms more dominant in morning



Resolution of symptoms with cannabis cessation

Causes of Cannabinoid Hyperemesis ?

Delayed gastric emptying



Toxic levels accumulate

Paradox

Cannabis has antiemetic properties

Medical Marijuana

Chemo patients

Nabilonel – For Nausea and vomiting

Dronabinol (Marinol) - For loss of appetite and weight loss



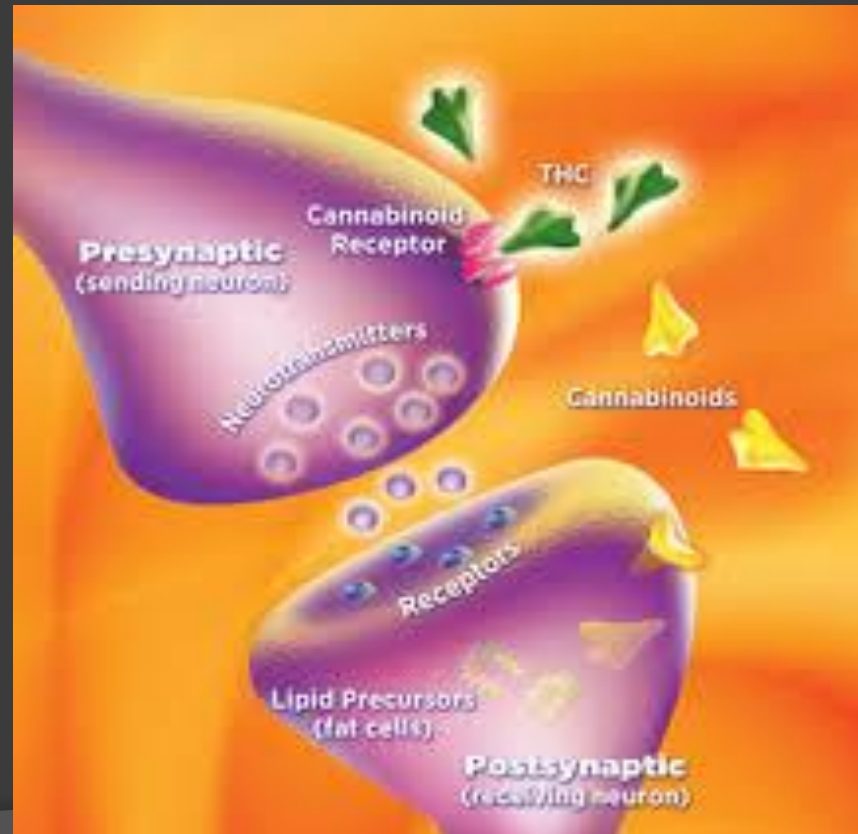
Hydroponically Grown

More concentrated amounts of THC



Endogenous Cannabinoid System

Cannabinoids bind to Cannabinoid Receptor's in the Brain



Causes of CHS

Compulsive Bathing

Hypothalamus known for regulation of temperature

Theory

Disruption of thermoregulatory systems

High doses of Delta – 9- THC can cause hypothermia

Synthetic Drugs



Herbs sprayed with chemical THC that give a cannabis like high.



“Multi Million dollar industry”



“Not for human consumption”



Synthetic herbal highs



Stronger side effects

Associated with Myocardial infarction

Acute kidney injury

Psychosis

Super strength

Seizures

Synthetic drug induced Hyperemesis

SPICE 200-fold higher incidence of acute psychosis relative to natural marijuana

Politics



Marijuana

Most widely used recreational illicit drug in
Australasia

Most commonly used
illegal drug in NZ



14 US states and the district of Columbia
have legalised medicinal cannabis

It is assumed by the scientific community that synthetic drug induced hyperemesis will be the same as cannabinoid hyperemesis and therefore treated the same.



Differential Diagnosis of Cyclical Vomiting:

Cyclic vomiting syndrome

Hyperemesis gravidarum

Psychogenic vomiting

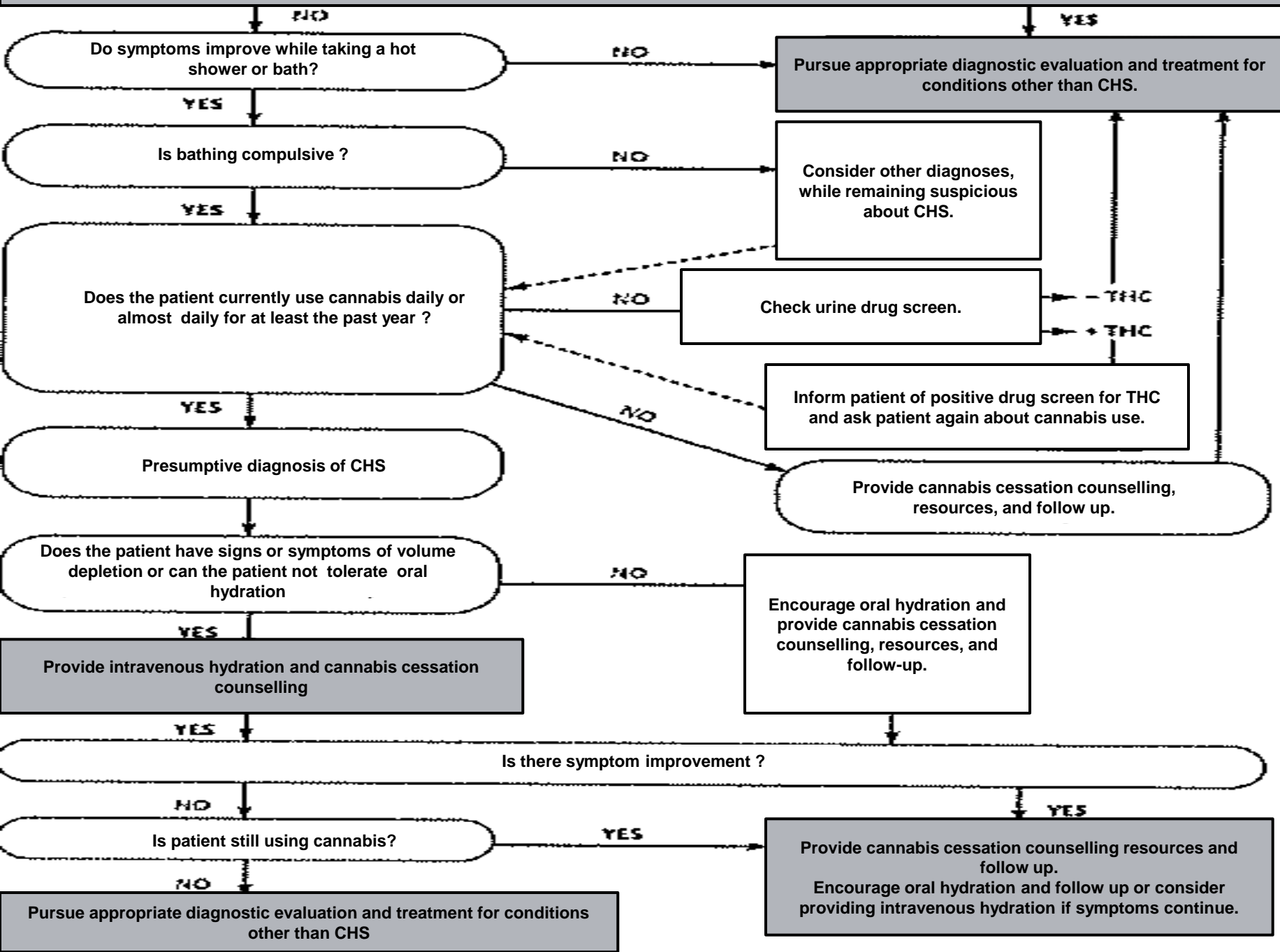
Bulimia

Addison disease

Migraine headaches



Patient presents with nausea and vomiting, signs and symptoms suggest severe underlying medical cause.



Management

Exclusion of other conditions

Primarily supportive treatment

Environment – calm and dimmed room

Rehydration as required

Referral to Alcohol and Drug Clinic

MANAGEMENT

Recommended Drugs



Benzodiazepines

Recommended as first line treatment in SCW

Quetiapine

For Marijuana withdrawal

Pro : Effectively decreased a subset of symptoms
(Short term)

Con :  Marijuana craving  Relapse

MEDICATIONS : For Symptom Management

For nausea/vomiting:

Ondansetron 4-8mg PO/IV up to t.d.s. Max 24mg/24hrs

Metoclopramide 10mg tds, Max 30mg/24hours

For Headaches/Muscle cramps:

Paracetamol 1-2 tabs max 4gm/24hours.



Chlorpromazine 10-50mg Max 200mg/24hoursHyoscine

Butylbromide (Buscopan) 10-20mg 4-6 hourly po/lv

Medications for Symptom Management

For Sedation :

Promethazine 25-50mg nocte Max 50mg at night

Quetiapine 50mg nocte Max 200mg/24hrs

Benzodiazepines :

ONLY for moderate to severe agitation of inpatients (no prescription as addictive)

For Agitation/Irritability:

Quetiapine 25-50mg, Max 200mg/24 hours

Chlorpromazine 10-50mg Max 200mg/24hours



Drug screen

Many new synthetic highs are not detected in routine DOA.

Basic **DOA SCREEN** includes:

1. Cocaine
2. Amphetamine
3. Marijuana (THC)
4. Opioids
5. Phencyclidine (PCP)



Cannabis one week in a naïve user
chronic users



two months in

How can Emergency Departments better collaborate with A&D clinics ?

Refer for follow up

Speak to case worker if already involved

Hospital Liaison person

Hand out on withdrawal of drugs





MOTIVATION

Some people need more than others...

5 Take Home Points

1: Criteria for CHS :

Cyclical Vomiting & Abdominal pain

Compulsive Bathing

Chronic Daily Cannabis use for over 1yr +

2: Avoid Extensive Medical Testing

3 : Benzodiazepines

4 : Fluid replacement

5: Refer to A&D



Cannabis Cessation = BEST CURE

References

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