***CASE PRESENTATION***

# Competing priorities during the COVID-19 pandemic: Treating GHB use disorder via telehealth at an Isolation and Quarantine Site

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# Disclosures

Tricia Wright receives consulting fees from McKesson.

We will be discussing off label use of a medication

# Learning Objectives

- Discuss GHB pathophysiology and clinical presentation
- Review treatment of GHB withdrawal
- Highlight potential tension between public health and patient autonomy in the context of the COVID-19 pandemic

# Context: San Francisco DPH Response to COVID-19

# Case presentation

Mr G is a 30M, White, h/o HIV experiencing homelessness referred to the I&Q site for COVID-19 exposure while at a shelter. The referral staff requested an addiction medicine consult for GHB use disorder.

Addiction Consult Telehealth assessment:

- 1 oz (~28 grams) of pure GHB every 3 days for 12 years
- Denied seizure, prior hospitalization for withdrawal or intoxication.
- Last use ~20hrs ago, now is experiencing mild withdrawal (anxiety*).

Question: Accept I&Q site or Refer to the ED? Is he too high risk?

# GHB (gamma hydroxybutyrate) Overview

**Pathophysiology**: GABA precursor, GHBR, $GABA_B$R, and many others: opioids, dopamine, serotonin, glutamate, acetylcholine[7]

**Onset**: 5-15 min, **Peak** 30-60 min, **DUA** 2-4hrs (dose dependent*, ↑ with ETOH)[1]

**Epidemiology**: young (~20s[3]), White (85%)[4], LGBTQ, used as a club drug, often co-ingested with other substances, date rape drug[5].

**Effects**: Anxiolytic, Euphoric, hypnotic[6].

**Route:** Oral powder or liquid formulations

4. DAWN, *Drug Abuse Warning Network*, 2011
5. Munir et al, *Emerg Med Australias*, 2008
6. Carter et al, *Drug Alcohol Depend*, 2009

# GHB – Withdrawal presentation and diagnosis

**Diagnosis**: Clinical. GHB not on urine tox, is on GC/MS

**Withdrawal**: mild = anxiety, insomnia, tremors, pain. Severe: profound disorientation/hallucinations, rhabdomyolysis, autonomic instability (~ETOH withdrawal).

Dysregulation can be lethal (cardiac arrest, seizures)

7. Kamal et al, *Neuropsychobiology*, 2016

# GHB - Withdrawal Risk Assessment

- Risk for Dependence and withdrawal symptoms
  - >10 g/day[7] over weeks-months
  - Onset of withdrawal typically 1-6 hrs, most by 24 hrs and can last weeks (~3-21 days)[8]

- Risk for severe withdrawal
  - >20g per day[9]
  - Continuous, around the clock use (i.e. q 2-3hrs)[8]

7. Kamal et al, *Neuropsychobiology*, 2016
8. Busardo et al, *Curr Neuropharmacol,* 2015
9. McDonough et al, *Drug Alcohol Depend*, 2004

# Case Update

We determined Mr G’s GHB use (28g q3days, last use ~24hrs ago) was low risk for a severe withdrawal syndrome

Offered I&Q stay, Addiction Medicine Consulted:

Patient’s concern: GHB craving would precipitate early departure

→ Gabapentin 300mg QID for GHB withdrawal/cravings (off label).

→ Increased monitoring was provided (daily wellness checks), and safety precautions were discussed.

# GHB Withdrawal Treatment

- Treatment options: Benzodiazepines, phenobarbitol, baclofen, gabapentin have been used, mostly in the inpatient setting[7].

- Treatment should generally be inpatient (close monitoring), severe withdrawal can require high dose benzodiazepines (i.e. diazepam 80-150mg)[8]

- Outpatient management may be considered if[10]:
  - Close monitoring available, Low risk use (<3x/day, <20g/day)
  - No comorbid alcohol or other drug use (benzodiazepines)
  - No active withdrawal symptoms or signs present

10. Zvosec, UpToDate, 2020

# Return to case of Mr. G.

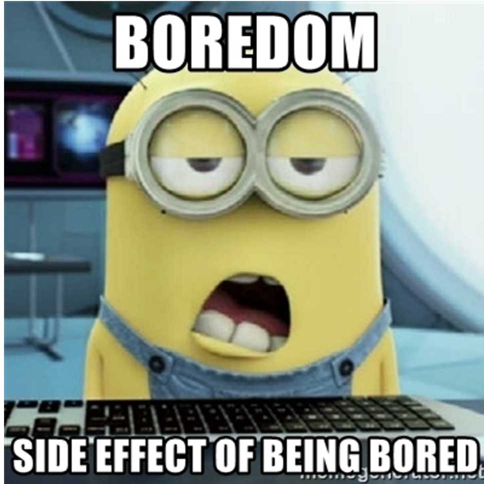
**Day 2:** Patient reported GHB cravings improved, attributed to Gabapentin

**Day 6:** Left for 8 hours for family emergency, returned to I&Q site. Addiction consult: Patient denied GHB use, reports severe boredom (had difficulties with television).

**Day 7:** Connected to HIV telehealth.

**Day 8:** Left I&Q site, citing boredom, presenting directly to prior HIV providers to start on ARVs.

# Patient Autonomy, competing priorities



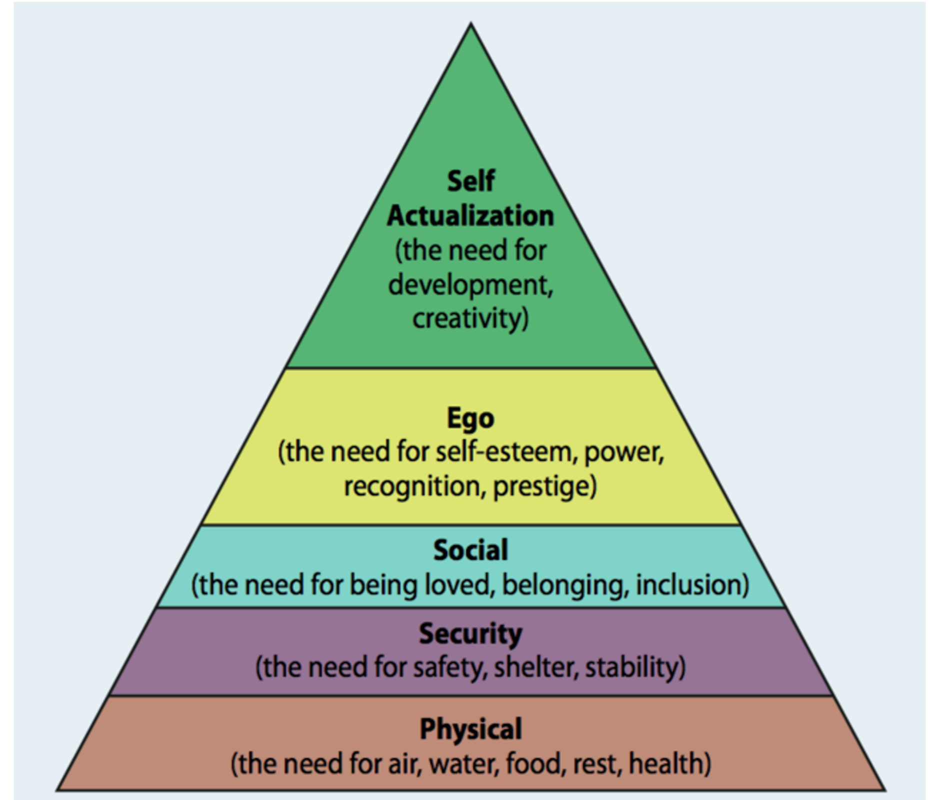

- [x] Undergoing GHB withdrawal (self-report)
- [ ] Tolerating boredom for 14 days

"I want to stay in quarantine to do my part for the pandemic, **but I'm SO BORED**"

# Considerations for public health programs

- For quarantine to be successful, more than just basic needs need to be considered.

- Quarantine can be an opportunity to address other chronic conditions that have fallen by the wayside.



# Summary

- GHB withdrawal can be life threatening; Highest risk: >20g/day, 2-3 times per day, for greater than a week

- Treatment of GHB withdrawal is generally done inpatient, outpatient care can be considered in low risk cases with frequent monitoring

- Addiction Medicine consultation may support public health goals by keeping potentially infectious people in the I&Q site

- Providing cognitively engaging activities to patients in quarantine may improve substance use and public health outcomes

# References

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# Thanks

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