

Complex Cases in Buprenorphine Treatment

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Action Period Assignments from 12/18/20

1. As we discussed, the diversion of buprenorphine is rarely definitively proven in a clinical setting. How do you detect diversion and what actions, or clinic policies could you implement to help mitigate this behavior?
2. What clinical interventions and/or office policies could you implement in your practice to help reduce the likelihood of early refill requests?

The Case of Carly

- ▶ 38-year-old G3P43 pregnant female at 17 weeks, who presents with a history of OUD, depression, ADHD, PTSD.
- ▶ Currently on Suboxone 8 mg 3x daily for the last 2 years, by another provider.
- ▶ Other meds: Adderall 30 mg daily, Zofran, PNV.
- ▶ She presents to the MFM clinic at Michigan Medicine for SUD and OB management.
- ▶ UDS upon initial assessment: + for buprenorphine and nicotine.

The Case of Carly

- ▶ Originally, patient reports that Suboxone will be continued by her current provider.
- ▶ 2 month later, patient requests that we take over bup prescribing, due to provider being uncomfortable with management during pregnancy.
- ▶ Patient was advised to return to clinic for a reassessment

The Case of Carly: 2nd follow-up visit

- ▶ Patient assessment was benign. She did not have any complaints or concerns, other than requesting refill for bup 8 mg 3x daily.
- ▶ Urine sample was requested: patient replies “already did it” and pulls the receptacle from her purse, which is wrapped in paper towel.
- ▶ She places container on counter.
- ▶ Assessment is complete and patient leaves the clinic.
- ▶ Suboxone Rx is sent electronically for a one week supply.

The Case of Carly: 2nd follow-up visit

- ▶ 10 minutes after patient leaves clinic, MA reports: “Didn’t you want a screen on Carly? The urine cup is not in her room...”
- ▶ Clinic staff were questioned, and no one knew the whereabouts of the sample.

What do you do now?

The Case of Carly: The missing sample...

- ▶ Patient was contacted by phone:
 - ▶ *“Hi Carly, the urine sample you provided is no longer in the exam room and we can’t account for its whereabouts. We need you to provide another sample or we cannot issue a prescription.”*
- ▶ Patient was in parking structure but returned to clinic and provided another urine sample.

The Case of Carly: Drug screen results

- ▶ Urine immunoassay: positive for amphetamine (consistent with prescribed Adderall use)
- ▶ Urine GC/MS was positive for buprenorphine and nicotine with the following comment:
 - ▶ *Buprenorphine is not normally seen with this analysis due to its conversion to metabolites. Presence of a large amount of buprenorphine indicates that it has been added to the urine.*

What would you do now?

The Case of Carly: The phone call...

- ▶ Patient was contacted immediately:
 - ▶ How would you construct the conversation?
 - ▶ How would you present the information to the patient?
 - ▶ Do you continue to provide care to the patient? If so, does your treatment approach change?

The Case of Carly

- ▶ Tips on managing unexpected drug screen results which may be embarrassing to patients:
 - ▶ Do NOT make any drastic change in treatment without a GC/MS or other definitive testing.
 - ▶ Objectively report the findings to the patients without judgement or bias and keep a neutral demeanor.
 - ▶ Give patient an opportunity to explain.
 - ▶ Emphasize the objectivity of your testing
 - ▶ Reinforce your willingness to continue to care for them as long as they're willing to work you.

The Case of Carly

- ▶ *I'm concerned about your drug screen from last Tuesday. Do you know why?*
 - ▶ **Open ended: allows patient to respond.**
- ▶ *It showed that the buprenorphine was in your urine at a very high level, and this is never seen under normal conditions.*
 - ▶ **Objective data, which the patient cannot dispute.**
- ▶ *Typically when this happens, the patient either provided fake urine or intentionally tampered with their sample.*
- ▶ *We have two options at this point: You can either share with me what's going on so I can help you, or you'll have to find another provider, because it's inappropriate for me to provide care under these type of circumstances.*

The Case of Carly

- ▶ Patient admitted to using Valium and was fearful of what may happen to her treatment if this was discovered in her urine.
- ▶ She was asked: “What did you do to your urine sample?”
 - ▶ Patient acknowledged using “someone else’s” urine. We assume it was FOB, who was with her at the time of the OB visit.
- ▶ Patient was scheduled for a follow-up the following Tuesday, where this was discussed in more detail.
- ▶ She was continued on buprenorphine: weekly prescriptions with weekly drug screens.

The Case of Carly: Takeaway Points

- ▶ It's critical the way you present **unexpected drug test results** to a patient. You need to express concern and the need for change, but not in a manner that drives the patient away.
- ▶ Attempts to conceal substance use are not grounds for patient discharge.
- ▶ REMEMBER: *You're a healthcare provider not a vending machine.*
 - ▶ *There is much more to OUD treatment than writing an Rx for buprenorphine.*

The Case of Susie

- ▶ 44-year-old female with a history of OUD, severe AUD, PTSD, and depression. The patient also report a remote history of binge eating disorder.
- ▶ Patient presented to UMATS requesting treatment for OUD.
- ▶ She's currently prescribed MS Contin 15 mg twice daily and oxycodone 10 mg every 6 hours, for the last several months following multiple cosmetic surgeries.
- ▶ Initially, patient reports her provider is attempting to wean her, but states she is experiencing significant withdrawal and feels she needs buprenorphine.

The Case of Susie

- ▶ MAPS report reveals patient was issued 30-day Rx of both MS Contin and oxycodone 2 weeks prior to appointment. When asked about this, she acknowledged overusing her medications.
- ▶ Patient was started on buprenorphine by home induction and up-titrated up to 16 mg daily.
- ▶ She contacted clinic on day 5 and stated that she was using an additional 4 mg, due to “withdrawal” and is asking to be prescribed 20 mg daily).

What do you do?

The Case of Susie

- ▶ Buprenorphine was increased to 20 mg daily.
- ▶ Why?
 - ▶ Clinician intuition
 - ▶ Patient was quite recovery minded (very active in recovery community and attendings meetings regular).
 - ▶ History of chronic pain
 - ▶ Low suspicion for diversion or other aberrant behaviors

The Case of Susie: 2nd follow-up visit

- ▶ Patient reports severe pain and continued symptoms of “withdrawal.”
- ▶ UDS is unremarkable
- ▶ No psychiatric concerns
- ▶ Patient requests further dosage increase.

What do you do?

The Case of Susie: Dosing

- ▶ Dose was increased to 24 mg daily (8 mg 3x day)
- ▶ Reasons? Same as before.
- ▶ Patient asked to provide UDS and to schedule RV in one week

The Case of Susie: 3rd UDS

- ▶ UDS was positive for ethyl-glucuronide was positive at 5,000 ng/mL
- ▶ Ethyl glucuronide is a metabolite of alcohol which is detected in the urine.
 - ▶ Used often in SUD treatment programs and professional monitoring programs to detect alcohol use.
 - ▶ Values > 500 ng/mL typically detect heavy alcohol use during the previous day.
 - ▶ Any exposure to alcohol will cause a positive result and false positives have been documented.
- ▶ The patient reported consuming “non-alcoholic beer” and reports this as the reason for the positive test.

Ethyl glucuronide

- ▶ Is detectable in blood, urine, tissues (brain, liver, fat, muscle, hair) and in keratin matrix postmortem.
- ▶ In urine, it is detectable up to 70–80 h after consumption of a modest amount of alcohol and up to 130 h after abundant consumption.
- ▶ False negative results of EtG are possible due to bacterial degradation in urinary tract infections. Thus, ethyl sulfate (EtS, which is not subject to this degradation, is often combined with EtG.
- ▶ Ethyl sulfate (EtS) can be detected in urine from a few hours up to 2–3 days after consumption of small quantities of alcohol.

The Case of Susie: Urine ETG

Conclusions: *The widespread use of propanol-containing products such as hand sanitizers may lead to sufficient uptake of propyl alcohols and excretion of significant amounts of propyl glucuronides to yield false-positive EIA EtG screening results. Thus, positive EtG immunoassay results have to be controlled by mass-spectrometry, in clinical cases at least if ethanol intake is denied by the patient.*

- ▶ REFERENCE: Arndt T, Grüner J, Schröfel S, Stemmerich K. False-positive ethyl glucuronide immunoassay screening caused by a propyl alcohol-based hand sanitizer. *Forensic Sci Int.* 2012 Nov 30;223(1-3):359-63. doi: 10.1016/j.forsciint.2012.10.024. Epub 2012 Nov 5. PMID: 23137849.

What do you do?

The Case of Susie: 4th Follow-up visit

- ▶ Patient reports to be doing well.
- ▶ No complaints. She appears cheerful.
- ▶ UDS obtained:
 - ▶ Urine ETG: negative
 - ▶ 7 panel UDS: negative
 - ▶ Urine buprenorphine: negative

What would you do?

The Case of Susie: Negative bup

- ▶ Patient asked if she could explain UDS results but could not.
- ▶ She was told: *“We usually see this when the medication is being sold or when a patient uses someone else’s urine.”*
- ▶ Patient became defensive and began complaining about the frequency of appointments and the cost of the multiple urine drug screens. She became angrier when she was informed that she would have to provide another UDS before the end of the day.
- ▶ Patient was told:
 - ▶ *“I understand your financial concerns, but I have to act in a clinically responsible way when I’m prescribing this medication.”*
 - ▶ *“Regardless of you may or may not have done, I still have to act appropriately when I’m confronted with these results.”*

The Case of Susie

- ▶ UDS obtained on day of appointment
 - ▶ Urine ethyl glucuronide: >20,000 ng/mL
 - ▶ Urine buprenorphine: positive
 - ▶ 7 panel UDS: negative
- ▶ Patient called multiple times but did not answer or return calls. She ultimately scheduled a f/u the following week.
- ▶ Patient was asked about the above lab results and admitted to drinking regularly and recognized that she was in the midst of a relapse.

What would you do now?

The Case of Susie: Managing EtOH

- ▶ Inpatient treatment was strongly advised, but patient declined.
- ▶ Ultimately, an out-patient detox with lorazepam, followed by an IOP program was agreed upon.
- ▶ Patient prescribed a 5-day taper of lorazepam and scheduled to f/u the following Monday (5 days later).
- ▶ **Patient no-showed to f/u appointment.**

Thoughts?

The Case of Susie: More concerns

- ▶ The patient's sister called the clinic and advised RN that patient "slept through" appointment b/c her new pain management provider prescribed Lyrica, which the patient has been over-using .
- ▶ Sister also reported that patient was drinking all weekend and was "stumbling and slurring her words." She further describes: "a closet packed with pills."
- ▶ Patient was contacted by phone and advised to inpatient treatment immediately. She agreed.
- ▶ Two hours after call, her sister called back, and stated patient was becoming belligerent and violent due to EtOH.
- ▶ 911 was called and patient transported to local ER by EMS

The Case of Susie: In the ER

- ▶ Patient found to have BAL of 240
- ▶ Hemoglobin was 7.1
- ▶ Patient provided supportive care, including IV hydration
- ▶ GI was consulted due to concern for GI bleed given low hemoglobin.
- ▶ Social work met with patient, who advised MSW that she is seeking inpatient treatment and that no further services are needed.
- ▶ Patient leaves ER Against Medical Advice and before GI consult.

Thoughts?

The Case of Susie: Conclusion

- ▶ Clinic RN contacted patient following AMA discharge
- ▶ Patient did not report any acute concerns but asked for additional lorazepam to help her detox from alcohol.
- ▶ Request was denied.
- ▶ Patient again stated that she's seeking inpatient treatment and assistance in this regard was offered.
- ▶ No further updates at this time.

Alcohol use and OUD

- ▶ Approximately one-third of patients on maintenance therapy for OUD have been found to have AUD.
- ▶ Numerous studies have identified the presence of an alcohol use disorder as a risk factor for mortality in opioid-dependent patients.
- ▶ According to most studies, opioid maintenance therapy does not change alcohol consumption, at least not in the majority of cases, but dose adjustments may help to reduce the risk of substance use, including alcohol.
- ▶ Clinical reports of liver injury in patients with hepatitis have raised concerns about the hepatotoxicity of buprenorphine and the buprenorphine/naloxone combination.

Soyka M. Alcohol use disorders in opioid maintenance therapy: prevalence, clinical correlates and treatment. *Eur Addict Res.* 2015;21(2):78-87. doi: 10.1159/000363232. Epub 2014 Nov 19. PMID: 25413371.

The Case of Susie: Takeaways

- ▶ Patients with OUD should be regularly screened for problematic drinking and advised to abstain from alcohol while on buprenorphine.
- ▶ An adulterated drug screen may be a sign of underlying problems, such as severe AUD, and thus, should be taken very seriously.
- ▶ If AUD is recognized, immediate treatment should be initiated, including a referral to a substance use treatment facility.
- ▶ If patient fails to engage in treatment for AUD, discontinuation of buprenorphine is warranted, given risk of hepatotoxicity and synergistic sedating effects.

Action Period Assignments

- ▶ Do you currently counsel your MAT patients on alcohol use prior to prescribing buprenorphine? If so, what do you advise your patients?
- ▶ A patient on buprenorphine with no history of AUD, psychiatric illness, or other SUD diagnoses asks you if he can “have drink of wine with my dinner a couple times a month.” What is your advice and why.
- ▶ You inform a patient that his urine testing will include EtG and EtS, and he responds to you: “I don’t consent to that. I don’t drink and I’m not paying for a test that is completely unnecessary.” What is your reply and why.