

USING EXTENDED RELEASE BUPRENORPHINE INJECTION TO DISCONTINUE SUBLINGUAL BUPRENORPHINE: A CASE SERIES



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BACKGROUND

- Sublingual Buprenorphine (SL-BUP)
 - Highly effective opioid use disorder (OUD) treatment
 - Increasingly used in chronic pain treatment
- While guidelines recommend long-term OUD treatment, some may desire discontinuation of buprenorphine

Kakko J et al, 2003, Lancet; Larochelle et al, 2019, Ann Intern Med; Cote J, Montgomery L, 2014, Pain Medicine; Kampman K, Jarvis M, 2015, J Addict Med.

BACKGROUND

- Tapering off SL-BUP is challenging due to protracted, intolerable withdrawal symptoms related to
 - Duration of SL-BUP exposure
 - Prolonged half-life (~35-hour)
 - High potency
 - Lowest SL-BUP dose 2mg (80 MME) occupies 48% opioid receptors

Pergolizzi J, Raffa R, Rosenblatt MH, 2020, Journal of Clinical Pharmacy and Therapeutics; Blum K et al, 2013, J Addict Res Ther; Greenwald M et al, 2003, Neuropsychopharmacology.

BACKGROUND

- In 2017, FDA approved extended-release buprenorphine (XR-BUP) for treatment of OUD
- XR-BUP is long acting injectable buprenorphine
 - half-life 46-60 days (vs SL-BUP ~35 hours)
 - administered monthly into abdominal subcutaneous tissue

METHODS

- Reviewed three successful cases using a single XR-BUP 100mg injection to taper stable patients maintained on SL-BUP off buprenorphine

SUMMARY OF CASES

AGE GENDER	SUBSTANCE RELATED DIAGNOSES	OPIOID USE PRIOR TO SL-BUP	MAX SL-BUP DOSE, TOTAL TIME ON SL-BUP	SL-BUP TAPER ATTEMPTS	SL-BUP DOSE AT TIME OF XR-BUP	PATIENT-REPORTED EXPERIENCE WITH SINGLE XR-BUP DOSE	MONTHLY FOLLOW-UP
51yo Male	Moderate opioid use disorder, Alcohol use disorder in sustained remission	Smoking heroin 1 year	8mg qday, 6 years	Several times over 5 years, decreased to 2mg, tried taper using buprenorphine patch and tramadol	4mg	“Slight, not intolerable, malaise”, irritableness in 4 th -6 th week “akin to not having coffee”, pre- injection constipation resolved over 2-3 months	Opioid cessation since Feb. 2019
35yo Female	Physiologic opioid dependence; Alcohol use disorder in sustained remission	Prescription oxycodone 25-30mg daily for migraine headaches during pregnancy.	6mg qday, 14 months	Decreased to 2mg for 10 months,	2mg	“I experienced absolutely zero withdrawal symptoms once the long acting buprenorphine was in place, the only downside was a small amount of pain at injection”	Opioid cessation since Feb. 2019
46yo Female	Physiologic opioid dependence	Prescription opioids for acute post-operative pain up to 954 MME	20mg qday, 13 months	Decreased to 6mg for 9 months	6mg	“Once I had the shot I had no withdrawal symptoms even after the first month”	Since Aug. 2019, three episodes of acute pain req 1-4 week opioid Rx

DISCUSSION

- Off label use for XR-BUP because
 - Did not follow recommended induction regimen for XR-BUP of two 300mg injections monthly followed by 100mg injection monthly
 - Two of these patients on buprenorphine for physical dependence to prescribed opioids and did not meet OUD criteria
- Unique subset of stable patients with long-term outpatient follow-up appropriate to discontinue buprenorphine
- Approach may not be appropriate for all patients maintained on SL-BUP

IMPLICATIONS

- These cases support a novel off-label use of XR-BUP to mitigate intolerable opioid withdrawal symptoms among stable patients who desire to discontinue SL-BUP
- Further research needed to determine which patients may be most successful with XR-BUP used for SL-BUP discontinuation with a focus on
 - Indication for buprenorphine initiation (e.g. chronic pain and/or OUD)
 - Severity of OUD
 - Psychosocial stability



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Thank you for your interest!

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