Comparison of 100mg vs 300mg Buprenorphine Extended-Release Injection in Maintenance Treatment of Opioid Use Disorder at a Low Barrier Outpatient Clinic

Category: Poster Presentation (in person)

Abstract Body

Intro: Extended-release buprenorphine (XR-BUP) is the first once-monthly subcutaneous injection approved in Canada for the treatment of moderate to severe opioid use disorder. Current recommended doses for XR-BUP injections are 300mg monthly for the first 2 months, followed by 100mg once monthly thereafter. However, there is clinical variation in the maintenance dose of XR-BUP being prescribed. Current dosing recommendations are based on the results of a trial conducted prior to widespread use of illicit fentanyl. As such, the validity of the 300/100mg dosing regimen for patients with likely higher than previously anticipated opioid tolerance remains unclear.

Methods: We conducted a Retrospective chart review of 47 patients initiated on XR-BUP who received at least 3 doses at a low barrier outpatient addiction clinic between Jan 2021 and Nov 2022. Objectives of our study were to 1) characterize patients receiving XR-BUP treatment at a low barrier outpatient addiction clinic, 2) identify factors associated with prescribing 300 vs. 100mg initial XR-BUP maintenance dose and 3) compare treatment outcomes for patients receiving different initial XR-BUP maintenance dose.

Results: In this clinical cohort, 29 patients (62%) received 100mg initial XR-BUP maintenance dose. No baseline demographic characteristic or substance use or treatment variable was found to have a significant association with the initial XR-BUP maintenance dose prescribed. The 300mg initial maintenance dose was associated with increased likelihood of continuing XR-BUP at the end of the study period (p = 0.02). The safety profile of XR-BUP appears excellent with no documented opioid overdoses or precipitated withdrawal events occurring in study patients on XR-BUP therapy.

Conclusion: Higher initial XR-BUP maintenance dose is associated with increased likelihood of XR-BUP treatment retention.

Key Words

- Education
- Opiate Agonist Therapy
- Opioids/Opiates
- Pharmacologic Interventions
- Substance Use Disorder (general)

Learning Objective # 1

Understand current recommended treatment protocol for extended-release Buprenorphine

Learning Objective # 2 Gain appreciation for implications associated with clinical variation in extended-release Buprenorphine prescribing patterns

Reference # 1 Cuperfain, A. B., Costa, T., & Chopra, N. (2023, January 9). Extended-release monthly Buprenorphine Injection. CMAJ. Retrieved April 11, 2023, from https://www.cmaj.ca/content/195/1/E14

Reference # 2 Wiest K et al. (2021) Examining the benefit of RBP-6000 300mg versus 100mg maintenance dose in opioid injectors. 83rd Annual Scientific Virtual Meeting of the College on Problems of Drug Dependence (CPDD), June 21-24, 2021.

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