

MONTHLY EXTENDED-RELEASE BUPRENORPINE USE IN PREGNANCY

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Background:

In pregnancy, medications for opioid use disorder (OUD) are safe and effective in reducing the risk of maternal overdose and preterm birth. Pregnancy is associated with significant physiologic changes that impact the pharmacokinetics of medications for OUD, including buprenorphine, requiring higher and more frequent doses to achieve an optimal therapeutic effect. There is limited clinical data on monthly BUP-XR use in pregnancy.

Methods:

This is a retrospective study of pregnant individuals with OUD who received monthly BUP-XR at our institution between 2023-2025. Maternal and infant medical records were reviewed. Maternal treatment, delivery and neonatal outcomes as well as buprenorphine (both BUP-XR and sublingual) dosing data was abstracted.

Results:

Twenty-five pregnant individuals utilized monthly BUP-XR from 2023-2025 with 3, 6 and 16 in 2023, 2024 and 2025, respectively. The median age was 33, 24 (96%) were white, 22 (88%) had public health insurance, 19 (76%) were multiparous and 11 (44%) had hepatitis C virus. Five were already on BUP-XR prior to pregnancy, 20 (80%) newly initiated BUP-XR during pregnancy following either illicit opioid (55%) or SL buprenorphine (45%) use. Over half (56%) required SL buprenorphine supplementation during their pregnancy, 24% used illicit opioids, and 8% discontinued BUP-XR treatment prior to delivery. Among neonates, all birthweights were appropriate for gestational age, no congenital anomalies were identified, and only 2 (9.1%) patients had a preterm birth (34 and 36 weeks). Only 4 (18.2%) infants were treated for NOWS and admitted to the NICU.

Conclusion:

BUP-XR is being increasingly utilized for OUD in pregnancy and treatment retention is high, but the current dosing strategies are insufficient due to the physiologic changes in pregnancy. Most pregnant individuals in our cohort required sublingual buprenorphine supplementation. Pregnancy-specific BUP-XR dosing strategies should be developed.

Disclosure of Interest Statement:

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