

Congenital malformation risk lower with buprenorphine versus methadone: Study

January 25 2024, by Elana Gotkine



The risk for congenital malformations is lower in association with buprenorphine versus methadone for opioid use disorder in pregnancy, according to a study published online Jan. 22 in *JAMA Internal Medicine*.

Elizabeth A. Suarez, Ph.D., M.P.H., from Brigham and Women's Hospital and Harvard Medical School in Boston, and colleagues

compared the risk for [congenital malformations](#) following in utero exposure to buprenorphine versus methadone in a population-based cohort study using data from publicly insured Medicaid beneficiaries from 2000 to 2018. Data were included for 13,360 pregnancies with enrollment from 90 days prior to pregnancy start through one month after delivery; first-trimester buprenorphine or methadone use was linked to infant outcomes.

Overall, 9,514 pregnancies with first-trimester buprenorphine exposure and 3,846 with methadone exposure were included in the cohort. The researchers found that the risk for malformations was 50.9 and 60.6 per 1,000 pregnancies for buprenorphine and methadone, respectively.

After confounding adjustment, buprenorphine was associated with a lower risk for malformations compared with methadone (risk ratio [RR], 0.82). For buprenorphine, risk was lower for cardiac malformations (RR, 0.63), including ventricular septal defect and secundum [atrial septal defect](#)/non-prematurity-related patent foramen ovale (RRs, 0.62 and 0.54, respectively), oral clefts (RR, 0.65), and clubfoot (RR, 0.55). Given low event counts, results for [neural tube defects](#) were uncertain.

"The small increase observed in the risk of malformations with methadone use compared with buprenorphine likely does not exclude [methadone](#) as the best treatment choice for some pregnant individuals, particularly those on stable treatment prior to pregnancy or patients who do not respond well to buprenorphine," the authors write.

More information: Elizabeth A. Suarez et al, First Trimester Use of Buprenorphine or Methadone and the Risk of Congenital Malformations, *JAMA Internal Medicine* (2024). [DOI: 10.1001/jamainternmed.2023.6986](#)

Cara Poland et al, Medication for the Treatment of Opioid Use Disorder

in Pregnancy Is Essential, *JAMA Internal Medicine* (2024). [DOI: 10.1001/jamainternmed.2023.6977](https://doi.org/10.1001/jamainternmed.2023.6977)

2024 HealthDay. All rights reserved.

Citation: Congenital malformation risk lower with buprenorphine versus methadone: Study (2024, January 25) retrieved 28 April 2024 from <https://medicalxpress.com/news/2024-01-congenital-malformation-buprenorphine-methadone.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.