Association of peripartum synthetic oxytocin administration and depressive and anxiety disorders within the first postpartum year.

Koff-Elefteriou A1, Nayak NL2, Hane J3, Guillane-Walker Y4, Moore Siman T5, Pelham-Mishoe R6,7

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BACKGROUND: Due to its potent effects on social behavior, including maternal behavior, oxytocin has been identified as a potential mediator of postpartum depression and anxiety. The objective of this study was to examine the relationship between peripartum synthetic oxytocin administration and the development of depressive and anxiety disorders within the first year postpartum. We hypothesized that women exposed to peripartum synthetic oxytocin would have a reduced risk of postpartum depressive and anxiety disorders compared with those without any exposure.

METHODS: Population-based data available through the Massachusetts Integrated Clinical Academic Research Database (MiCARD) were used to retrospectively (2006-2014) examine this relationship and calculate the relative risk of peripartum synthetic oxytocin for the development of postpartum depressive and anxiety disorders in exposed (n = 9,684) compared to unexposed (n = 37,648) deliveries.

RESULTS: Among deliveries to women with a history of prepregnancy depressive or anxiety disorder, exposure to peripartum oxytocin increased the risk of postpartum depressive or anxiety disorder by 36% (relative risk (RR): 1.36; 95% confidence interval (95% CI): 1.29-1.55). In deliveries to women with no history of prepregnancy depressive or anxiety disorder, exposure to peripartum oxytocin increased the risk of postpartum depressive or anxiety disorder by 32% compared to those not exposed (RR: 1.32; 95% CI: 1.23-1.42).

CONCLUSIONS: Contrary to our hypothesis, results indicate that women with peripartum exposure to synthetic oxytocin had a higher relative risk of receiving a documented depressive or anxiety disorder diagnosis or antidepressant/antianxiety prescription within the first year postpartum than women without synthetic oxytocin exposure.

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KEYWORDS: anxiety/anxiety disorders; biological marker; depression; maternal-child; pregnancy and postpartum

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