

Exposure to certain antidepressants in pregnancy may modestly increase risk of autism spectrum disorders

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Prenatal exposure to selective serotonin reuptake inhibitors, especially during the first trimester, is associated with a modest increase the risk of developing an autism spectrum disorder, according to a report published Online First in the *Archives of General Psychiatry*.

"The prevalence of [autism spectrum disorders](#) (ASDs) has increased over recent years," the authors write as background information in the article. "Use of antidepressant medications during pregnancy also shows a secular increase in recent decades, prompting concerns that [prenatal exposure](#) may contribute to increased risk of ASD."

To evaluate if prenatal exposure to [antidepressants](#), including [selective serotonin reuptake inhibitors](#) (SSRIs), is associated with an increase in ASD, Lisa A. Croen, Ph.D., of Kaiser Permanente Northern California, Oakland, and colleagues examined medical records for [children](#) drawn from the Childhood Autism Perinatal Study conducted by Kaiser Permanente Medical Care Program in Northern California. The authors included 298 children with ASD (case group) and their mothers, and 1,507 control children and their mothers in the study.

Twenty mothers of children in the case group (6.7 percent) and 50 mothers of children in the control group (3.3 percent) had at least one prescription for an antidepressant in the year prior to the birth of the study child. Of the 20 case mothers who were prescribed antidepressants, 13 (65 percent) were prescribed SSRIs only, two (10 percent) were prescribed an SSRI in combination with another antidepressant and five (25 percent) were prescribed one or more non-SSRI antidepressants only. Of the 50 control mothers who were prescribed an antidepressant, 25 (50 percent) were prescribed SSRIs only, nine (18 percent) were

prescribed an SSRI in combination with another antidepressant and 16 (32 percent) were prescribed one or more non-SSRI antidepressants only.

After adjusting for maternal and birth factors, [mothers](#) of children with ASD were twice as likely to have at least one antidepressant prescription in the year prior to delivery. When compared with women with no antidepressant prescription during the study period, those with a prescription for a SSRI were more than twice as likely to have a child later diagnosed with ASD. This association was not seen for the small group of women who were prescribed a non-SSRI antidepressant only.

Additionally, after adjustment for a history of depression during the year prior to delivery, SSRI exposure during the first trimester remained significantly associated with risk of ASD, as was a history of SSRI exposure at any point during the year prior to delivery. Conversely, no association was seen between risk of ASD and the indication for treatment (mother having a history of depression or any mental health disorder) for the year prior to delivery.

"Although the number of children exposed prenatally to selective serotonin reuptake inhibitors in this population was low, results suggest that exposure, especially during the [first trimester](#), may modestly increase the risk of ASD," the authors conclude. "We recommend that our findings be considered as preliminary and treated with caution, pending results from further studies designed to address the very complex question of whether prenatal exposure to SSRIs may be etiologically linked to later diagnoses of ASDs in offspring."

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