A Closer Look at the Link Between Specific SSRIs and Birth Defects

Centers for Disease Control - Treating for Two: https://www.cdc.gov/pregnancy/meds/treatingfortwo/features/ssrisandbirthdefects.html

What did we already know?

Selective serotonin reuptake inhibitors (SSRIs) are medications used to treat depression and other mental health conditions. Previous studies provide conflicting evidence about potential links between the use of SSRIs during pregnancy and certain birth defects.

What does this study add?

In this CDC study published in The BMJ, researchers re-assessed several previously reported links between SSRI use and birth defects using more recent data. These results reflect not only the new data, but also incorporate results from previously published independent studies. Researchers found some birth defects occur about two or three times more frequently among babies born to women who took certain SSRI medications, like fluoxetine (Prozac) and paroxetine (Paxil), early in pregnancy. However, links between birth defects and other SSRIs, like sertraline, were not observed in this CDC study.

What were this study’s main findings?

- Researchers investigated links reported in previous studies by combining those results with new data.
  - In previous studies, fluoxetine appeared to be linked with four types of birth defects. In this study, researchers observed fluoxetine to be linked with these two birth defects:
    - Heart defects with obstruction of the right ventricular outflow tract
    - Craniosynostosis, a birth defect of a baby’s skull
  - Researchers still observed five out of the seven previous links between paroxetine and certain birth defects. In this study, paroxetine appeared to be linked with these birth defects:
    - Anencephaly, a birth defect of a baby’s brain and skull
    - Atrial septal defects, a type of heart defect
    - Heart defects with obstruction of the right ventricular outflow tract
    - Gastroschisis, a birth defect of the abdominal (belly) wall
    - Omphalocele, another type of birth defect of the abdominal (belly) wall
  - Reassuringly, researchers did not confirm links between sertraline, the SSRI used most often, and any of the birth defects observed in previous studies.
In total, 7 of the 21 previously reported specific SSRI-birth defect links were confirmed in this analysis.

- Despite the increased risks for certain birth defects from some SSRIs found in this study, the actual risk for a birth defect among babies born to women taking one of these medications is still very low. Because these specific types of birth defects are rare, even doubling the risk still results in a low absolute risk. For example, the risks for heart defects with obstruction of the right ventricular outflow tract could increase from 10 per 10,000 births to about 24 per 10,000 births among babies of women who are treated with paroxetine early in pregnancy.