SSRI Effects on the Fetal Nonstress Test

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Objectives
Selective serotonin reuptake inhibitors (SSRIs) are commonly prescribed for mood disorders in pregnancy, though studies regarding effects on fetal behavior are conflicting. Previous studies have suggested that fetuses exposed to these medications in the third trimester may have decreased fetal heart rate variability. Since effects on fetal heart parameters may affect the interpretation of antenatal testing, clinicians should be aware of effects of these medications that may impair effective testing.

Methods
A retrospective observational cohort study was performed to compare nonstress test (NST) parameters of fetuses exposed to SSRIs with unexposed fetuses at 36 weeks gestation. Subjects were excluded if they had multiple gestations, fetal anomalies including growth restriction, illicit substance use or use of other psychotropic medications. NSTs were compared for fetal heart baseline rate, variability, time to reactivity, number of accelerations over time, and number of fetal movements over time.

Results
Data collection is ongoing. In a preliminary analysis of the first 89 charts meeting inclusion criteria, 4 (4.5%) patients used SSRIs at the time of testing. There is no difference between fetuses exposed to SSRIs versus those unexposed in average TTR (12.7 vs 9.6 min, p=0.47), baseline HR (139.3 vs 145 bpm, p=0.21), variability (14.9 vs 9.8 bpm, p=0.08), accelerations (0.22 vs 0.21 per min, p=0.90) or fetal movement (0.64 vs 0.91 per min, p=0.35).

Conclusions
Preliminary analysis demonstrates that there is no association between SSRI use and changes in NST. Findings to date are limited by a small number of subjects using SSRIs at the time of testing. If remaining analysis confirms this finding, clinicians should be reassured that NST assessment remains an accurate means of determining fetal wellbeing in patients using these medications.

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Disclosures
None