Using antipsychotics in pregnancy

A Canadian observational study found no significant difference in maternal and short-term perinatal outcomes in pregnant women prescribed antipsychotics compared with matched pregnant women not prescribed antipsychotics.

Overview:

- Maternal and short-term perinatal outcomes did not appear to differ in an observational study of pregnant women prescribed antipsychotics and matched pregnant women who were not prescribed antipsychotics.
- NICE guidance recommends that when choosing an antipsychotic for a pregnant woman, the limited data on the safety of these drugs in pregnancy and the postnatal period should be taken into account.
- This observational study emphasises the need for more intensive monitoring of women with severe mental illness during pregnancy through perinatal and obstetric services.

Background: Deciding whether to use medication to treat mental health problems in women who are pregnant requires careful consideration of the risks and benefits.

Stopping medication during pregnancy in women with severe mental health problems may adversely affect their mental health or their ability to care for their unborn child (Kalifeh et al. 2015).

Taking antipsychotics during pregnancy is unlikely to cause congenital abnormalities, but may be associated with preterm birth, low birth weight and neonatal withdrawal effects (Sadowski et al. 2013). However, most of the evidence in this area comes from use of older generation antipsychotics and not the newer (‘atypical’) antipsychotics.

Current advice: The NICE guideline on antenatal and postnatal mental health recommends the following on using antipsychotics in women during pregnancy and the postnatal period:

- When assessing the risks and benefits of antipsychotic medication for a pregnant woman, take into account risk factors for gestational diabetes and excessive weight gain.
• When choosing an antipsychotic, take into account that there are limited data on the safety of these drugs in pregnancy and the postnatal period.

• If a pregnant woman is stable on an antipsychotic and likely to relapse without medication, advise her to continue the antipsychotic.

• Do not offer depot antipsychotics to a woman who is planning a pregnancy, pregnant or considering breastfeeding, unless she is responding well to a depot and has a previous history of non-adherence with oral medication.

The BNF provides specific advice on use of antipsychotics in pregnancy (see also the summary of product characteristics for individual drugs). In addition, the UK Teratology Information Service provides advice to NHS professionals on medicine use in pregnancy, along with some information for the public.

The NICE pathway on antenatal and postnatal mental health brings together all related NICE guidance and associated products on the area in a set of interactive topic-based diagrams.

**New evidence:** A Canadian population-based cohort study by Vigod et al. (2015) considered the effects of taking antipsychotic drugs during pregnancy on both the mother and infant. The study considered women with single births who had at least 2 consecutive filled prescriptions for an antipsychotic between the estimated conception date and the delivery date (with 1 having been filled in the first or second trimester).

The cohort consisted of 1209 women who filled a prescription for an antipsychotic during pregnancy and 40,314 women did not. Using an algorithm that adjusted for various factors such as diagnoses, other drugs and hospital admissions, 1021 women prescribed an antipsychotic were matched to 1021 women who were not. A newer, ‘atypical’ antipsychotic was exclusively prescribed in 90% of the 1021 matched women (60% of these were exclusively prescribed quetiapine, 18% olanzapine and 12% risperidone).

In the unmatched cohorts, women prescribed antipsychotics, compared with women who were not, had a significant increase in the main maternal outcomes of gestational diabetes (7.7% versus 6.2%, relative risk [RR]=1.24, 95% confidence interval [CI] 1.01 to 1.53) and hypertensive disorders of pregnancy (5.2% versus 3.5%, RR=1.49, 95% CI 1.16 to 1.92), but not venous thromboembolism. However, these differences were not significant when assessed in the matched cohorts.

For the main perinatal outcomes, in the unmatched cohorts, antipsychotic prescription was associated with a significant increase in preterm birth (less than 37 weeks gestation; 14.8% versus 10.3%, RR=1.51, 95% CI 1.29 to 1.78) and birth weight greater than the 97th percentile (3.7% versus 2.6%, RR=1.44, 95% CI 1.06 to 1.96). However, as with the maternal outcomes, these differences were not significant when assessed in the matched cohorts.

Of the secondary outcomes, only an increased risk of labour induction and operative vaginal delivery were associated with prescription of antipsychotics during pregnancy in the matched cohort.

The authors concluded that taking antipsychotics in pregnancy had minimal impact on important maternal and short-term perinatal outcomes. However, they suggested that the rate of adverse outcomes was high enough to warrant careful assessment of the mother and fetus.

Limitations include that the effects of smoking, obesity and psychiatric symptoms were not considered. In addition, participants were collected from a database of people who were eligible for free medication, who tend to have worse health and lower socioeconomic status than people who pay privately for their medication. Thus the results may not apply to women who are healthier or of a higher socioeconomic status.
Commentary by Nigel Barnes, Chief Pharmacist, Birmingham and Solihull Mental Health Foundation Trust:

“Prescribing in pregnancy is a difficult decision for clinicians and patients. The potential impact on the pregnancy, fetus and the newborn child, as well as on child development, all need to be considered carefully along with treatment of conditions that affect a pregnant woman. It is known that women with severe mental illness have a higher risk of complications in pregnancy compared to women without mental illness. Not treating severe mental illness also carries significant risk for the woman and fetus.

“This study does not alter existing guidance on considering using antipsychotics in pregnant women. It does, however, provide some reassurance that offering newer antipsychotic medication to pregnant women may be unlikely to adversely affect the short-term outcomes of the mother or child.

“This study also reminds us that women who have been exposed to antipsychotic medication before pregnancy, or who receive antipsychotics during pregnancy, are at greater risk of complications in pregnancy than the general population of pregnant women. This may be related to the use of antipsychotic medicines or the severe mental illness. This finding emphasises the need for more intensive monitoring of women with severe mental illness during pregnancy through perinatal and obstetric services.

“Further studies will be useful to confirm whether the findings from this study apply to all antipsychotics or whether some are in fact safer than others.”

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