Update on antidepressant use during breastfeeding

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Abstract

Question Many of my patients who are diagnosed with postpartum depression want to continue breastfeeding. How safe are the newer antidepressant medications during breastfeeding?

Answer The newer antidepressants transfer into breast milk in low amounts and have not been associated with serious adverse events. Therefore, the antidepressant most effective for the woman should be considered.

Mise à jour sur les antidépresseurs durant l'allaitement

Résumé

Question Bon nombre de mes patientes qui ont reçu un diagnostic de dépression postpartum veulent continuer à allaiter. Dans quelle mesure les plus récents médicaments antidépresseurs sont-ils sécuritaires pendant l'allaitement?

Réponse Les plus récents antidépresseurs passent dans le lait maternel en petites quantités et n'ont pas été associés à des événements indésirables sérieux. Par conséquent, il y a lieu d'envisager l'antidépresseur le plus efficace pour la femme en cause.

Postpartum depression is a common condition, affecting up to 15% of mothers.[1] It can have devastating effects on the mother-infant relationship if left untreated.[2] Also, adverse effects on behavioural and cognitive development have been reported in children of untreated mothers.[3] In recent years, increasing numbers of affected women are being diagnosed and treated. Selective serotonin reuptake inhibitors and serotonin-norepinephrine reuptake inhibitors are often used as first-line agents.[4] Because breastfeeding has many well established advantages for both the mother and the baby, exclusive breastfeeding is now encouraged,[5] and the use of antidepressants during breastfeeding has become an important topic as mothers struggling with depression decide how to feed their newborns.

Antidepressants in breast milk

The relative infant dose is a calculation that divides the dose offered to the infant via milk (mg/kg/d) by the mother's weight-adjusted dose (mg/kg/d). An infant dose via breast milk of less than 10% of the maternal weight-adjusted dose is generally considered safe in breastfeeding.[6] Most antidepressants are excreted in low concentrations in breast milk, with few reaching 10% of the maternal weight-adjusted dose.[7] Paroxetine and sertraline produce low relative infant doses in the 0.5% to 3% range, while fluoxetine, venlafaxine, and citalopram produce milk levels closer to, and sometimes even above, the 10% limit (**Table 1**).[8-10]

The concentration of the medication in infant plasma is a more direct measure of infant exposure; however, those measurements are often not available. In a pooled analysis of 57 studies by Weissman et al,[11] the use of nortriptyline, paroxetine, and sertraline during lactation produced undetectable plasma levels in more than 200 infants tested. On the other hand, fluoxetine, citalopram, and the metabolite of venlafaxine, *O*-desmethylvenlafaxine, had measurable levels in some infants; however, these levels were usually low.[8,11]

Some adverse events in infants exposed to antidepressants via breast milk have been reported, mostly

Table 1. Relative infant doses of commonly used antidepressants

ANTIDEPRESSANT	RELATIVE INFANT DOSE, %
Bupropion[8]	2
Citalopram[8]	3-10
Desvenlafaxine[9,10]	5.5-8.1
Duloxetine[8]	< 1
Escitalopram[8]	3-6
Fluoxetine[8]	< 12
Fluvoxamine[8]	< 2
Mirtazapine[8]	0.5-3
Paroxetine[8]	0.5-3
Sertraline[8]	0.5-3
Venlafaxine[8]	6-9

in case reports and case series. They include symptoms such as irritability, decreased feeding, and sleep problems, which are subtle, nonspecific, and not necessarily caused by the antidepressants. These suspected adverse events were more often reported after exposure to fluoxetine and citalopram.[11] Thus, many authors recommend sertraline and paroxetine be used post partum owing to their lower infant plasma ratios and lack of reported adverse effects.[8] It should be emphasized that if a mother was successfully treated for depression during her pregnancy, the same medication should usually be used in the postpartum period. And in any case with a clinical indication for a specific antidepressant treatment, prescribing that antidepressant can be considered. Discontinuing or switching an antidepressant treatment in the fragile postpartum period should be discouraged.[8]

Conclusion

At present, there is little evidence that exposure to antidepressants through breast milk has any serious adverse effects in infants; however, long-term neurodevelopmental effects have not been adequately studied. There are many benefits of treating postpartum depression and advantages of breastfeeding, for both the mother and the infant.[2,3,5] Therefore, if maternal depression necessitates treatment with pharmacotherapy, then breastfeeding need not be avoided, and the antidepressant that would be most effective for the mother should be considered.

Competing interests
None declared

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MOTHERISK Motherisk questions are prepared by the Motherisk Team at the Hospital for Sick Children in Toronto, Ont. **Dr Chad** is a resident in the Department of Medicine at the University of Toronto in Ontario. She was a member of the Motherisk Program at the time of preparing this update. **Dr Pupco** is a member, **Ms Bozzo** is Assistant Director, and **Dr Koren** is Director of the Motherisk Program. **Dr Koren** is supported by the Research Leadership for Better Pharmacotherapy during Pregnancy and Lactation. He holds the Ivey Chair in Molecular Toxicology in the Department of Medicine at the University of Western Ontario in London.

Do you have questions about the effects of drugs, chemicals, radiation, or infections in women who are pregnant or breastfeeding? We invite you to submit them to the Motherisk Program by fax at 416 813-7562; they will be addressed in future Motherisk Updates. Published Motherisk Updates are available on the *Canadian Family Physician* website (**www.cfp.ca**) and also on the Motherisk website (**www.motherisk.org**).