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Vortioxetine

Revised: April 18, 2022.

CASRN: 508233-74-7

Drug Levels and Effects

Summary of Use during Lactation

Amounts of vortioxetine in milk appear to be low. If vortioxetine is required by the mother, it is not a reason to discontinue breastfeeding. However, until more data are available, vortioxetine should be used with careful infant monitoring during breastfeeding.

Drug Levels

Maternal Levels. Three lactating mothers were taking vortioxetine for depression, two were taking 10 mg once daily and one was taking 20 mg once daily. Milk samples were taken 5 times over a 24-hour period before the dose and at 5, 7, 10, 12, and 24 hours after a dose at steady state. With the dose of 10 mg, the peak concentration

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of vortioxetine in milk was 13.9 mcg/L at 7 hours after the dose. With the dose of 20 mg, the peak milk concentration was 52.3 mcg/L at 5 hours after the dose. The weight-adjusted infant dosages were 1.1% for 10 mg dose and 1.7% for 20 mg dose.[1]

A woman who was taking a vortioxetine dose of 76.1 mcg/kg daily collected 6 to 8 milk samples over a 24-hour period. The peak milk level was 8.2 mcg/L and the mean concentration was 6 mcg/L. Using the mean value, the absolute infant dose in a fully breastfed infant would be 0.9 mcg/kg daily and the relative infant dose would be 1.2% of the mother's weight-adjusted dosage.[2]

Infant Levels. Relevant published information was not found as of the revision date.

Effects in Breastfed Infants

Three lactating mothers were taking vortioxetine for depression, two were taking 10 mg once daily and one was taking 20 mg once daily. All mothers were exclusively breastfeeding their infants aged 1, 2 and 6 months of age. No mothers reported any unusual behavior in their infants.[1]

A woman who was taking a vortioxetine dose of 76.1 mcg/kg daily partially breastfed her infant. She did not observe any adverse effects in her infant.[2]

Effects on Lactation and Breastmilk

Vortioxetine has caused hyperprolactinemia and galactorrhea in some patients.[3,4]

An observational study looked at outcomes of 2859 women who took an antidepressant during the 2 years prior to pregnancy. Compared to women who did not take an antidepressant during pregnancy, mothers who took an antidepressant during all 3 trimesters of pregnancy were 37% less likely to be breastfeeding upon hospital discharge. Mothers who took an antidepressant only during the third trimester were 75% less likely to be breastfeeding at discharge. Those who took an antidepressant only during the first and second trimesters did not have a reduced likelihood of breastfeeding at discharge. [5] The antidepressants used by the mothers were not specified.

A retrospective cohort study of hospital electronic medical records from 2001 to 2008 compared women who had been dispensed an antidepressant during late gestation (n = 575) to those who had a psychiatric illness but did not receive an antidepressant (n = 1552) and mothers who did not have a psychiatric diagnosis (n = 30,535). Women who received an antidepressant were 37% less likely to be breastfeeding at discharge than women without a psychiatric diagnosis, but no less likely to be breastfeeding than untreated mothers with a psychiatric diagnosis.[6] None of the mothers were taking vortioxetine.

In a study of 80,882 Norwegian mother-infant pairs from 1999 to 2008, new postpartum antidepressant use was reported by 392 women and 201 reported that they continued antidepressants from pregnancy. Compared with the unexposed comparison group, late pregnancy antidepressant use was associated with a 7% reduced likelihood of breastfeeding initiation, but with no effect on breastfeeding duration or exclusivity. Compared with the unexposed comparison group, new or restarted antidepressant use was associated with a 63% reduced likelihood of predominant, and a 51% reduced likelihood of any breastfeeding at 6 months, as well as a 2.6-fold increased risk of abrupt breastfeeding discontinuation. Specific antidepressants were not mentioned.[7]

Alternate Drugs to Consider

Nortriptyline, Paroxetine, Sertraline

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References

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Substance Identification

Substance Name

Vortioxetine

CAS Registry Number

508233-74-7

Drug Class

Breast Feeding

Lactation

Milk, Human

Antidepressive Agents

Serotonin Uptake Inhibitors

Serotonin 5-HT1 Receptor Agonists

Serotonin 5-HT1 Receptor Antagonists

Serotonin 5-HT3 Receptor Antagonists