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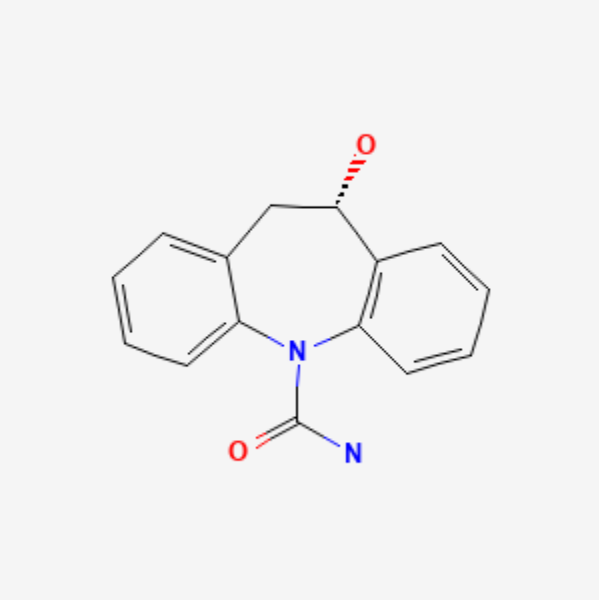
NLM Citation: Drugs and Lactation Database (LactMed®) [Internet]. Bethesda (MD): National Institute of Child Health and Human Development; 2006-. Eslicarbazepine. [Updated 2024 Jun 15].
Bookshelf URL: https://www.ncbi.nlm.nih.gov/books/

Eslicarbazepine

Revised: June 15, 2024.

CASRN: 104746-04-5



Drug Levels and Effects

Summary of Use during Lactation

No information is available on the use of eslicarbazepine during breastfeeding. However, eslicarbazepine is the active metabolite of oxcarbazepine. Limited information indicates that oxcarbazepine would not be expected to cause any adverse effects in breastfed infants, especially if the infant is older than 2 months. Monitor the infant for drowsiness, adequate weight gain, and developmental milestones, especially in younger, exclusively breastfed infants and when using combinations of anticonvulsants.

Drug Levels

In published reports of anticonvulsant use during breastfeeding, most women were taking a combination of anticonvulsants. Some other anticonvulsants (e.g., phenytoin, carbamazepine) stimulate the metabolism of other drugs including anticonvulsants, whereas others (e.g., valproic acid) inhibit the metabolism of other drugs. Therefore, the relationship of the maternal dosage to the concentration in breastmilk can be quite variable, making calculation of the weight-adjusted percentage of maternal dosage less meaningful than for other drugs in this database.

Eslicarbazepine is the active 10-hydroxy metabolite of oxcarbazepine.

Maternal Levels. Two women were treated with oxcarbazepine during pregnancy and lactation. Milk levels of eslicarbazepine metabolite in breastmilk were 50 to 65% of the maternal blood level in one mother during the first week postpartum. Specific values were not provided in the abstract.[1]

An epileptic woman took oxcarbazepine orally 300 mg 3 times daily during pregnancy and postpartum. Milk levels of eslicarbazepine taken in the 6 months postpartum were about 50% of maternal blood levels which averaged 5.7 mg/L. Therefore, milk levels averaged 2.85 mg/L for eslicarbazepine, although the authors reported that the assay method was not very accurate for breastmilk.[2]

A woman diagnosed with bipolar disorder was taking oxcarbazepine 300 mg every 12 hours (9 mg/kg) by mouth. Milk and blood samples were taken in the morning 11 hours after the previous dose twice at 8 and 23 days postpartum. Levels of eslicarbazepine were 5.6 and 10.4 mg/L on the 2 days, respectively.[3]

Infant Levels. A woman diagnosed with bipolar disorder was taking oxcarbazepine 300 mg every 12 hours (9 mg/kg) by mouth. Blood samples were obtained from her breastfed infant (extent not stated) after breastfeeding (exact time not stated) on 2 occasions, at 8 and 23 days of age. The infant had serum concentrations of eslicarbazepine of <0.1 and 0.2 mg/L at the 2 times, respectively.[3]

Two infants whose mothers were taking oxcarbazepine during pregnancy and postpartum breastfeeding (extent not stated) had blood samples at 3 to 4 weeks of age. Their serum eslicarbazepine concentrations were about 5% of their mothers' serum concentrations.[4]

An infant was born to a mother taking oxcarbazepine 150 mg twice daily during pregnancy and postpartum. The infant's serum eslicarbazepine concentration on postnatal day 6 was 2.6 mg/L, which was about 15% that of the mother's.[5]

Effects in Breastfed Infants

No specific information is available in mothers taking eslicarbazepine. See the LactMed record on oxcarbazepine for relevant information.

Effects on Lactation and Breastmilk

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

Alternate Drugs to Consider

(Seizure Disorder) Carbamazepine, Divalproex, Gabapentin, Lamotrigine, Oxcarbazepine, Phenytoin, Valproic Acid

References

1. Pedersen B. Oxcarbazepine in breast milk. 17th Epilepsy International Congress, Jerusalem Israel. 1987.

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3. Lutz UC, Wiatr G, Gaertner HJ, et al. Oxcarbazepine treatment during breast-feeding: A case report. J Clin Psychopharmacol 2007;27:730-2. PubMed PMID: 18004156.
4. Öhman I, Tomson T. Pharmacokinetics of oxcarbazine in neonatal period and during lactation. Epilepsia 2009;50 (Suppl. S4):239. doi:10.1111/j.1528-1167.2009.02063.x
5. Chen CY, Li X, Ma LY, et al. In utero oxcarbazepine exposure and neonatal abstinence syndrome: Case report and brief review of the literature. Pharmacotherapy 2017;37:e71-e75. PubMed PMID: 28543284.

Substance Identification

Substance Name

Eslicarbazepine

CAS Registry Number

104746-04-5

Drug Class

Breast Feeding

Lactation

Milk, Human

Anticonvulsants