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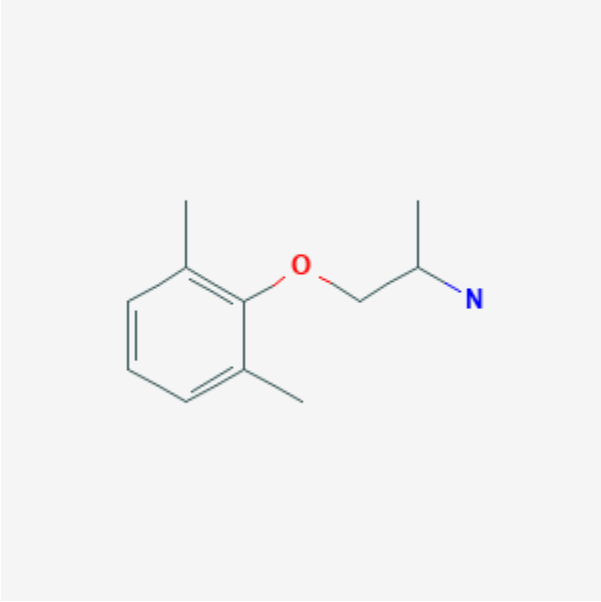
Mexiletine

Revised: June 3, 2019.

CASRN: 31828-71-4



Drug Levels and Effects

Summary of Use during Lactation

Limited information indicates that maternal doses of mexiletine up to 600 mg daily produce low levels in milk and would not be expected to cause any adverse effects in breastfed infants, especially if the infant is older than 2 months. Because of the relative lack of data concerning breastfeeding during maternal mexiletine therapy, exclusively breastfed infants should be carefully monitored if this drug is used during lactation, possibly including measurement of serum levels to rule out toxicity if there is a concern.

Drug Levels

Maternal Levels. A woman taking mexiletine 200 mg orally every 8 hours had milk levels measured during the first 4.5 days postpartum. The highest peak milk mexiletine level was 959 mcg/L and the lowest trough milk level was about 310 mcg/L.[1]

One woman taking mexiletine 200 mg orally three times daily had milk mexiletine levels of 600 and 900 mcg/L at unspecified times after doses at 2 and 6 weeks postpartum.[2]

Data from these two cases indicate that the dosage that the maximum dosage the infant receives from breastmilk is less than 2% of the mother's weight-adjusted dosage.

In an abstract describing a new analytic method, the authors describe a woman who was taking an unstated dosage of mexiletine. The peak milk mexiletine concentration was 1.9 mg/L and the average was1.43 mg/L. The authors calculated that the infant would receive a relative dosage of 2 to 4 % of the maternal dosage.[3]

Infant Levels. One woman taking mexiletine 200 mg orally three times daily. Her breastfed infant's serum levels were undetectable (<50 mcg/L) at unspecified times after doses at 2 and 6 weeks postpartum.[2]

Effects in Breastfed Infants

Failure to thrive in a 17-day-old breastfed infant may possibly have been caused by maternal use of mexiletine or atenolol (or both). The authors felt that mexiletine was unlikely to have caused the problem.[4]

Effects on Lactation and Breastmilk

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

References

1. Lewis AM, Patel L, Johnston A et al. Mexiletine in human blood and breast milk. Postgrad Med J. 1981;57:546-7. PubMed PMID: 7329891.
2. Timmis AD, Jackson G, Holt DW. Mexiletine for control of ventricular dysrhythmias in pregnancy. Lancet. 1980;2:647-8. Letter. PubMed PMID: 6107439.
3. Monfort A, Martin B, Boucoiran I et al. Feasibility study of drugs quantification in breast milk by liquid chromatography coupled to mass spectrometry (LC-MS/MS). Birth Defects Res. 2019 ;111 (9 Special Issue):558. Abstract.
4. Lownes HE, Ives TJ. Mexiletine use in pregnancy and lactation. Am J Obstet Gynecol. 1987;157:446-7. PubMed PMID: 3618696.

Substance Identification

Substance Name

Mexiletine

CAS Registry Number

31828-71-4

Drug Class

Breast Feeding

Lactation

Antiarrhythmics