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Dimenhydrinate

Revised: September 20, 2021.

CASRN: 523-87-5

Drug Levels and Effects

Summary of Use during Lactation

Small, occasional doses of dimenhydrinate would not be expected to cause any adverse effects in breastfed infants. Larger doses or more prolonged use may cause effects in the infant or decrease the milk supply, particularly in combination with a sympathomimetic such as pseudoephedrine or before lactation is well established. Single bedtime doses after the last feeding of the day may be adequate for many women and will minimize any effects of the drug.

Drug Levels

Dimenhydrinate is the 8-chlortheophyllinate salt of diphenhydramine.

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Maternal Levels. One old study that used a biologic assay system reported that after a 100 mg intramuscular dose of diphenhydramine in four women, drug levels in milk were undetectable in two and 42 and 100 mcg/L in two others at one hour after the dose. Five hours after the dose, milk levels were undetectable in two women and 20 and 100 mcg/L in two others.[1] No studies using modern assay methods have been reported.

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

Effects in Breastfed Infants

Relevant published information on dimenhydrinate was not found as of the revision date. In one telephone follow-up study, mothers reported irritability and colicky symptoms 10% of infants exposed to various antihistamines and drowsiness was reported in 1.6% of infants. None of the reactions required medical attention. In this study, irritability was reported in one infant of seven exposed to dimenhydrinate in breastmilk.[2]

Effects on Lactation and Breastmilk

Antihistamines in relatively high doses given by injection can decrease basal serum prolactin in nonlactating women and in early postpartum women.[3,4] However, suckling-induced prolactin secretion is not affected by antihistamine pretreatment of postpartum mothers.[3] Whether lower oral doses of antihistamines have the same effect on serum prolactin or whether the effects on prolactin have any consequences on breastfeeding success have not been studied. The prolactin level in a mother with established lactation may not affect her ability to breastfeed.

One woman became dependent on dimenhydrinate during her first pregnancy and continued to take it in a dose of 150 mg daily while she breastfed her infant for 3 months. The infant did well except for a febrile seizure at 2 years of age, which was probably unrelated to dimenhydrinate. During her second pregnancy, she took dimenhydrinate 300 mg daily during the pregnancy and while breastfeeding her infant for 2 years.[5]

Alternate Drugs to Consider

Meclizine

References

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Substance Identification

Substance Name

Dimenhydrinate

Dimenhydrinate 3

CAS Registry Number

523-87-5

Drug Class

Breast Feeding

Lactation

Antihistamines

Antiemetics

Gastrointestinal Agents