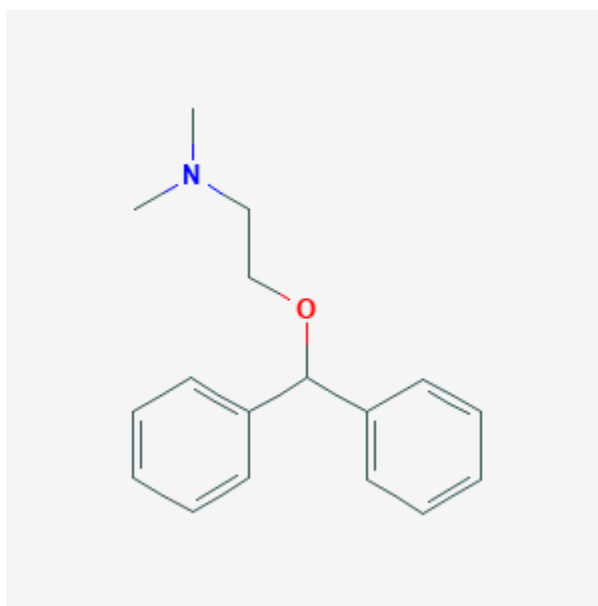




Diphenhydramine

Revised: October 31, 2018.

CASRN: 58-73-1



Drug Levels and Effects

Summary of Use during Lactation

Small, occasional doses of diphenhydramine 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. The nonsedating antihistamines are preferred alternatives.

Drug Levels

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

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, drowsiness was reported in 1 infant of 12 exposed to diphenhydramine 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 diphenhydramine 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 (which is 55% diphenhydramine) during her first pregnancy and continued to take it in a dose of 150 mg (83 mg diphenhydramine) 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 (165 mg diphenhydramine) daily during the pregnancy and while breastfeeding her infant for 2 years.[5]

Alternate Drugs to Consider

Desloratadine, Fexofenadine, Loratadine

References

1. Rindi V. La eliminazione degli antistaminici di sintesi con il latte e l'azione latto-goga de questi. Riv Ital Ginecol. 1951;34:147-57.
2. Ito S, Blajchman A, Stephenson M et al. Prospective follow-up of adverse reactions in breast-fed infants exposed to maternal medication. Am J Obstet Gynecol. 1993;168:1393-9. PubMed PMID: 8498418.
3. Messinis IE, Souvatzoglou A, Fais N et al. Histamine H1 receptor participation in the control of prolactin secretion in postpartum. J Endocrinol Invest. 1985;8:143-6. PubMed PMID: 3928731.
4. Pontiroli AE, De Castro e Silva E, Mazzoleni F et al. The effect of histamine and H1 and H2 receptors on prolactin and luteinizing hormone release in humans: sex differences and the role of stress. J Clin Endocrinol Metab. 1981;52:924-8. PubMed PMID: 7228996.
5. Kaya FD. A patient with dimenhydrinate dependence: A case report. Klinik Psikofarmakoloji Bulteni. 2014;24:184-7. DOI: [10.5455/bcp.20140131023347](https://doi.org/10.5455/bcp.20140131023347).

Substance Identification

Substance Name

Diphenhydramine

CAS Registry Number

58-73-1

Drug Class

Breast Feeding

Lactation

Antihistamines