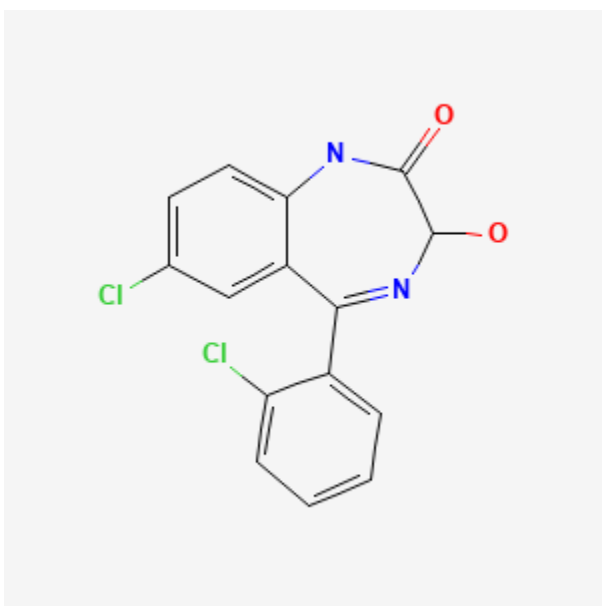




Lorazepam

Revised: January 15, 2024.

CASRN: 846-49-1



Drug Levels and Effects

Summary of Use during Lactation

Lorazepam has low levels in breastmilk, a short half-life relative to many other benzodiazepines, and is safely administered directly to infants. Evidence from nursing mothers indicates that lorazepam does not cause any adverse effects in breastfed infants with usual maternal dosages. A safety scoring system finds lorazepam possible to use during breastfeeding.[1] Monitor the infant for sedation, poor feeding and poor weight gain.

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Drug Levels

Maternal Levels. Four women were given 3.5 mg of lorazepam orally 2 hours before undergoing cesarean section. Colostrum levels of lorazepam averaged 8.5 mcg/L at 4 hours after the dose; conjugated lorazepam metabolites were not measured.[2]

Another woman taking lorazepam 2.5 mg orally twice a day for the first 5 days postpartum had milk levels of free and conjugated lorazepam of 12 and 35 mcg/L, respectively, at an unspecified time on day 5.[3] Since infants can deconjugate and absorb glucuronides, the total drug level is probably more important than the free drug alone. Using the total amount excreted, an exclusively breastfed infant would receive about 7 mcg/kg daily with this maternal dosage or about 8.5% of the maternal weight-adjusted dosage.

A woman who was 4 weeks postpartum was taking lorazepam 2.5 mg 1 to 3 times daily and lorazepam, which is partially metabolized to lorazepam, 2 mg once daily. On day 5 of therapy after taking 2 doses of lorazepam in the previous 8 hours, her lorazepam milk level was 123 mcg/L. On day 6 after having taken 3 doses in the previous 24 hours, her milk lorazepam level was 89 mcg/L. On day 7, milk levels were 55 and 40 mcg/L at 14 and 18.5 hours after her last dose, respectively.[4]

Three women who were taking oral lorazepam 0.5 mg daily donated milk samples between 3 and 6 days postpartum at 2 hours after a dose at the estimated peak serum concentration and just before a dose. One woman who was taking a dose of 1 mg daily had a 2-hour milk level of 1.64 mcg/L and a trough milk level of 0.826 mcg/L. The other 2 women 2-hour milk levels of 1.72 and 1.98 mcg/L. Both had trough milk levels less than the lower limit of quantification of 0.5 mcg/L.[5]

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

Effects in Breastfed Infants

The newborn infant of a mother taking 2.5 mg of lorazepam orally twice daily for 5 days after delivery showed no signs of sedation.[3]

In a telephone follow-up study, 124 mothers who took a benzodiazepine while nursing reported whether their infants had any signs of sedation. Sixty-four mothers took lorazepam while breastfeeding and none reported sedation in her infant.[6]

A prospective cohort study of infants breastfed by mothers in an inpatient mother-baby psychiatric unit in India followed 7 infants who were exposed to risperidone in breastmilk; most received partial supplementation. One infant whose mother was taking risperidone 4 mg and lorazepam 2 mg developed sedation that resolved when lorazepam was discontinued.[7]

Effects on Lactation and Breastmilk

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

Alternate Drugs to Consider

Oxazepam, Temazepam

References

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Substance Identification

Substance Name

Lorazepam

CAS Registry Number

846-49-1

Drug Class

Breast Feeding

Lactation

Milk, Human

Hypnotics and Sedatives

Anti-Anxiety Agents

Benzodiazepines