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Alprazolam

Revised: January 15, 2024.

CASRN: 28981-97-7

Drug Levels and Effects

Summary of Use during Lactation

A safety scoring system finds alprazolam possible to use during breastfeeding.[1] Because of reports of effects in infants, including sedation, alprazolam is probably not the best benzodiazepine for repeated use during nursing, especially with a neonate or premature infant. A shorter-acting benzodiazepine without active metabolites is preferred. If alprazolam is used long term, monitor the infant for sedation, poor feeding and poor weight gain. After a single dose of alprazolam, there is usually no need to wait to resume breastfeeding.

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Drug Levels

Maternal Levels. Eight lactating women who averaged 11.8 weeks postpartum (range 6 to 28 weeks) were given a single 0.5 mg dose of alprazolam orally. Eleven breastmilk samples were obtained over the 36 hours after the dose. A mean peak alprazolam milk level of 3.7 mcg/L occurred at an average of 1.1 hours (range 0.47 to 3.8 hours) after the dose. The half-life of alprazolam in milk averaged 14.5 hours. The metabolites 4-hydroxyalprazolam and alpha-hydroxyalprazolam were not detected (<0.5 to 1 mcg/L) in milk. The authors calculated that an exclusively breastfed infant whose mother was taking alprazolam in the normal dosage range would receive a daily dosage of 0.5 to 5 mcg/kg or about 3% of the maternal weight-adjusted dosage.[2]

A lactating woman was taking alprazolam and donated milk samples before a dose and 2 hours after a dose at day 3 postpartum and at 1 month postpartum. At 3 days postpartum, she was taking 0.8 mg daily. Her trough milk alprazolam concentration was 2.78 mcg/L and 2-hour milk level was 3.4 mcg/L. At 1 month postpartum, she was taking 1 mg daily and her 2-hour milk level was 5.42 mcg/L. No metabolites were detected in breastmilk. [3]

A woman who was taking an oral alprazolam dose of 2.4 mg daily donated milk samples at between 3 and 6 days postpartum. She had milk levels of 24.5 mcg/L at 2 hours after the dose and 23.8 mcg/L at 4 hours after the dose. [4]

A woman with dissociative disorder and persistent dysthymic depression was treated during pregnancy with brotizolam 0.25 mg daily, propericiazine 10 mg daily, and zolpidem 5 mg daily. Zolpidem was discontinued at week 28 and sulpiride 100 mg daily was begun at week 33. On postpartum day 5, alprazolam 0.4 mg daily was begun. Milk samples taken at 7.5 and 11.5 hours after the previous dose on day 9 postpartum contained 0.9 and 0.5 mcg/L of alprazolam, respectively.[5]

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

Effects in Breastfed Infants

Increased infant irritability following withdrawal of breastfeeding occurred in a 1-week-old infant whose mother had taken alprazolam during pregnancy and continued to take it after delivery. This reaction probably indicates that there was sufficient alprazolam in breastmilk to prevent withdrawal. The authors reported correspondence with the manufacturer who stated that they had received spontaneous reports of infant withdrawal symptoms (crying, irritability and sleep disturbances) for 2 weeks in a 9-month-old exclusively breastfed infant after slow (over 3 weeks) maternal discontinuation of alprazolam (dosage unspecified).[6]

In one telephone follow-up study of 5 infants (ages not stated) exposed to alprazolam during breastfeeding, 1 mother reported drowsiness in her infant. The reaction did not require medical attention.[7]

In a telephone follow-up study, 124 mothers who took a benzodiazepine while nursing reported whether their infants had any signs of sedation. About 5% of mothers were taking alprazolam. One mother who was taking sertraline 50 mg daily, zopiclone 2.5 mg about every 3 days as needed, and also took alprazolam 0.25 mg on 2 occasions, reported sedation in her breastfed infant.[8]

Effects on Lactation and Breastmilk

Unlike other benzodiazepines, alprazolam can increase serum prolactin.[9,10] One woman developed galactorrhea, amenorrhea and elevated serum prolactin after taking 3 mg of sustained-release alprazolam and 5 to 6 mg of immediate-release alprazolam daily for several months for self-treatment of fear, poor sleep, palpitations and gastrointestinal discomfort. After slow discontinuation of alprazolam and institution of quetiapine and fluvoxamine, galactorrhea ceased after about one month, menses normalized after about 2

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3

months, and serum prolactin decreased to a normal level.[11] The prolactin level in a mother with established lactation may not affect her ability to breastfeed.

Alternate Drugs to Consider

Lorazepam, Oxazepam, Temazepam

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Substance Identification

Substance Name

Alprazolam

CAS Registry Number

28981-97-7

Drug Class

Breast Feeding

Lactation

Milk, Human

Hypnotics and Sedatives

Anti-Anxiety Agents

Benzodiazepines