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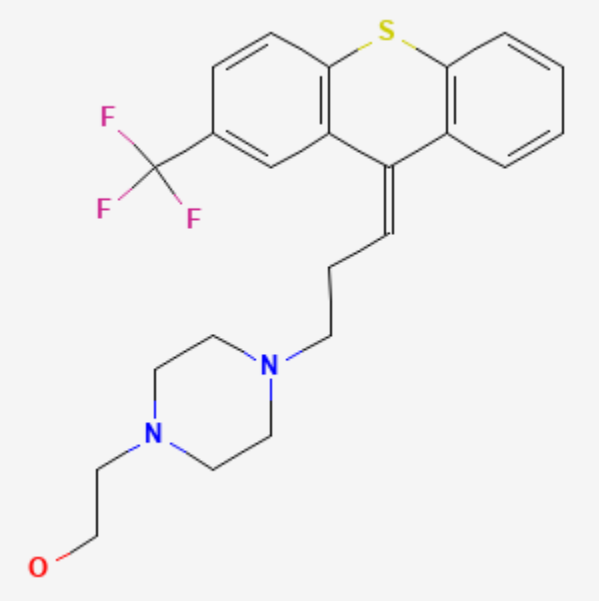
Flupenthixol

Revised: November 30, 2022.

CASRN: 2709-56-0; 53772-82-0



Drug Levels and Effects

Summary of Use during Lactation

Flupenthixol is not approved for marketing in the United States by the U.S. Food and Drug Administration, but is available in other countries. Limited information indicates that maternal oral doses of up to 4 mg daily or depot injections of 40 mg every 2 weeks produced low levels in milk and breastfed infants' serum, and caused no adverse developmental consequences. A safety scoring system finds flupenthixol possible to use cautiously during breastfeeding.[1] Until more data are available, flupenthixol should be used with careful infant monitoring during breastfeeding.

Drug Levels

Maternal Levels. Three women received the cis isomer of flupenthixol, cis-(z)-flupenthixol, during pregnancy and nursing; 2 of the women were receiving a depot injection. Milk cis-(z)-flupenthixol concentrations on days 4 and 41 postpartum from the woman receiving 40 mg every 2 weeks were 0.8 and 1.8 mcg/L, respectively. Milk cis-(z)-flupenthixol concentrations on day 17 postpartum from the woman receiving 60 mg every 3 weeks was 1.8 mcg/L. In the mother taking 2 mg of cis-(z)-flupenthixol orally every day, a milk concentration on day 30 postpartum was 1.8 mcg/L; however, the collection time was not stated.[2]

One woman received flupenthixol during pregnancy and postpartum. She took a daily oral dose of 1 mg of flupenthixol during pregnancy and 4 mg daily starting on the first day postpartum. Milk samples were taken 7 times over 36 hours on days 6 and 7 postpartum. The highest milk flupenthixol level of 6.8 mcg/L occurred 4.5 hours after the dose, and the average of the milk levels was 2.8 mcg/L. Milk flupenthixol levels measured on day 20 postpartum at 2 hours after the dose averaged 2.2 mcg/L with a maternal dose of 3 mg daily. On day 48 postpartum, flupenthixol was undetectable (<2 mcg/L) in milk 3.5 hours after a maternal dosage of 2 mg daily. Milk levels taken after feeding were much higher than those taken before feeding, probably because of higher concentrations in the more fat-rich hindmilk. The authors estimated that an exclusively breastfed infant would receive 0.4 mcg/kg daily or 0.6% of the maternal weight-adjusted dosage.[3]

Infant Levels. A woman took flupenthixol 1 mg and nortriptyline 100 mg daily during pregnancy and flupenthixol 4 mg and nortriptyline 125 mg daily immediately postpartum. Her exclusively breastfed infant had flupenthixol serum concentrations of <0.2 mcg/L and <0.3 mcg/L on days 6 and 7 postpartum, respectively.[3]

Effects in Breastfed Infants

A woman took flupenthixol 1 mg and nortriptyline 100 mg daily during pregnancy and flupenthixol 4 mg and nortriptyline 125 mg daily immediately postpartum. She exclusively breastfed her infant. Over a 4-month period, the infant showed no signs of adverse drug effects and had normal motor development with a maternal dosage of flupenthixol 2 mg daily and nortriptyline 75 mg daily.[3]

Effects on Lactation and Breastmilk

Flupenthixol can increase serum prolactin and has caused galactorrhea.[4-7] The prolactin level in a mother with established lactation may not affect her ability to breastfeed.

Alternate Drugs to Consider

Haloperidol, Olanzapine, Quetiapine, Risperidone

References

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Substance Identification

Substance Name

Flupenthixol

CAS Registry Number

2709-56-0

Drug Class

Breast Feeding

Lactation

Milk, Human

Antipsychotic Agents

Dopamine Antagonists