

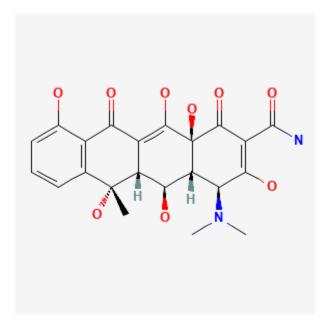
NLM Citation: Drugs and Lactation Database (LactMed®) [Internet]. Bethesda (MD): National Institute of Child Health and Human Development; 2006-. Oxytetracycline. [Updated 2021 Feb 15]. **Bookshelf URL:** https://www.ncbi.nlm.nih.gov/books/



Oxytetracycline

Revised: February 15, 2021.

CASRN: 79-57-2



Drug Levels and Effects

Summary of Use during Lactation

A number of reviews have stated that tetracyclines are contraindicated during breastfeeding because of possible staining of infants' dental enamel or bone deposition of tetracyclines. However, a close examination of available literature indicates that there is not likely to be harm in short-term use of oxytetracycline during lactation because milk levels are low and absorption by the infant is inhibited by the calcium in breastmilk. Short-term use of oxytetracycline is acceptable in nursing mothers. As a theoretical precaution, avoid prolonged or repeat courses during nursing. Monitor the infant for rash and for possible effects on the gastrointestinal flora, such as diarrhea or candidiasis (thrush, diaper rash).

Disclaimer: Information presented in this database is not meant as a substitute for professional judgment. You should consult your healthcare provider for breastfeeding advice related to your particular situation. The U.S. government does not warrant or assume any liability or responsibility for the accuracy or completeness of the information on this Site.

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Drug Levels

Maternal Levels. In an old study using a microbiologic assay, 5 women in the first week postpartum were given oxytetracycline in dosages ranging from 2 to 4 grams daily in single or divided doses. Oxytetracycline generally did not appear in milk for the first 24 hours. Concentrations then ranged from 0.25 to 1 mg/L until about a day following discontinuation of the drug.[1]

In another old study using a microbiologic assay, milk oxytetracycline levels were in an unspecified number of nursing mothers at 9 am after various dosages of oxytetracycline during the previous days. Whether they had mastitis and the time postpartum were not stated. Milk levels increased to as high as 3 mg/L after a daily dose of 1.5 grams orally for 3 days. Milk levels increased to 3 mg/L after a daily dose of 2 grams orally for 3 days.[2]

Two women were given 1.5 grams daily of oral oxytetracycline. Milk levels ranged from 0.7 to 1.1 mg/L with the peak occurring 7 hours after the dose. The authors estimated that a breastfed infant would receive 300 mcg daily of oxytetracycline in milk.[3]

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

Effects in Breastfed Infants

No adverse effects were noted in an unspecified number of breastfed infants whose mothers were taking oral oxytetracycline 1.5 or 2 grams daily for 3 days. Ages of the infants and extent of breastfeeding were not stated.[2]

Effects on Lactation and Breastmilk

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

Alternate Drugs to Consider

Doxycycline, Tetracycline

References

- 1. Ottolenghi-Preti GF, Massironi A. Ann Ostet Ginecol. 1952;74:746–58. [Terramycin in lactation; specific method of determination]. PubMed PMID: 13031337.
- 2. Grüner JM. Geburtshilfe Frauenheilkd. 1955;15:354–60. [The excretion of terramycin and tetracycline in human milk]. PubMed PMID: 14380696.
- 3. Borderon E, Soutoul JH, Borderon JC, et al. Med Mal Infect. 1975;5:373–6. [Excretion of antibiotics in human milk].

Substance Identification

Substance Name

Oxytetracycline

CAS Registry Number

79-57-2

Drug Class

Breast Feeding

Lactation

Oxytetracycline 3

Anti-Infective Agents

Antibacterial Agents

Tetracyclines