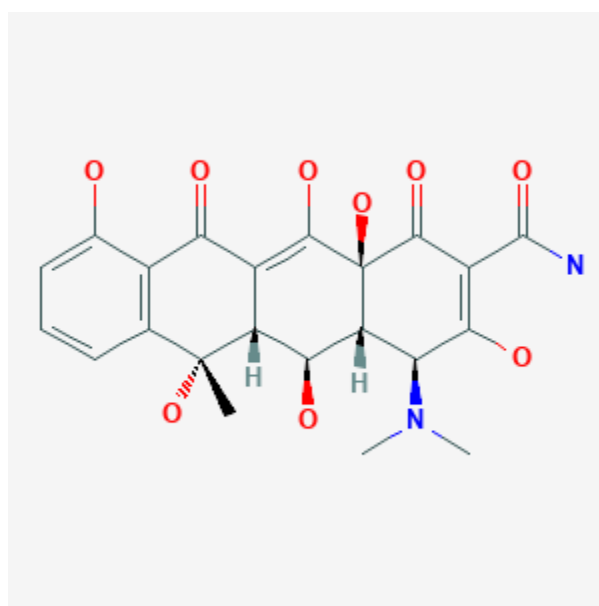




## Oxytetracycline

Revised: October 31, 2018.

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).

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

## Substance Identification

### Substance Name

Oxytetracycline

### CAS Registry Number

79-57-2

### Drug Class

Breast Feeding

Lactation

Anti-Infective Agents

Antibacterial Agents

Tetracyclines