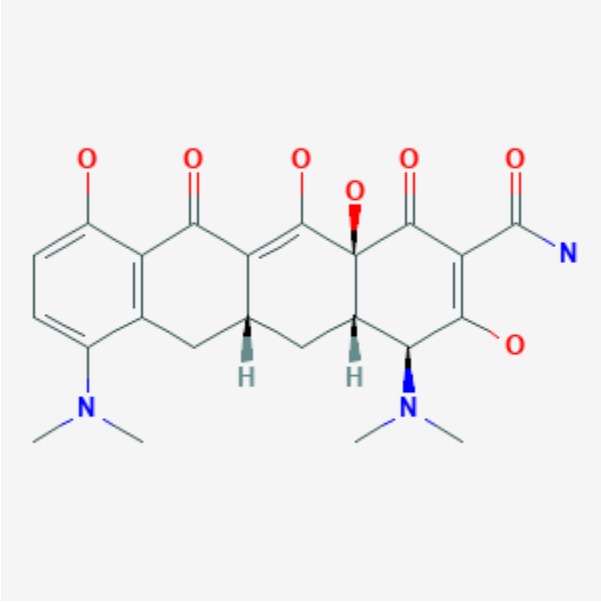
U.S. National Library of Medicine
National Center for Biotechnology Information

NLM Citation: Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National Library of Medicine (US); 2006-. Minocycline. [Updated 2018 Oct 31].
Bookshelf URL: https://www.ncbi.nlm.nih.gov/books/

Minocycline

Revised: October 31, 2018.

CASRN: 10118-90-8



Drug Levels and Effects

Summary of Use during Lactation

Many reviews state 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 minocycline during lactation because milk levels are low and absorption by the infant is inhibited by the calcium in breastmilk. Short-term use of minocycline 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). Black discoloration of breastmilk has been reported with minocycline.

Drug Levels

Maternal Levels. After a single dose of minocycline 200 mg orally in 2 patients (time postpartum not stated), a peak milk level of 0.8 mg/L occurred at 6 hours after the dose. Average milk levels ranged between 0.5 and 0.8 mg/L during the 12 hours after the dose and a total of 18 mcg was excreted during this time.[1]

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

Effects in Breastfed Infants

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

Effects on Lactation and Breastmilk

A woman taking minocycline 100 mg twice daily for almost 4 years developed galactorrhea after taking perphenazine, amitriptyline and diphenhydramine, and the breast secretion was black in color.[2]

Another woman who had nursed her infant and produced occasional small amounts of breastmilk during the 18 months after weaning was given oral minocycline 150 mg daily. After 3 to 4 weeks, expressed milk had become black. Iron levels in milk were over 100 times greater than that found in normal milk. A mammogram was normal.[3]

In both of these cases, macrophages containing a black, iron-containing pigment were found in milk. It is thought that the pigment is an iron chelate of minocycline or one of its metabolites.[2][3]

Alternate Drugs to Consider

Doxycycline, Tetracycline

References

1. Mizuno S, Taketa M, Sano S et al. Minocycline. Jpn J Antibiot. 1969;22:473-9. PubMed PMID: 4909972.
2. Basler RSW, Lynch PJ. Black galactorrhea as a consequence of minocycline and phenothiazine therapy. Arch Dermatol. 1985;121:417-8. PubMed PMID: 4038862.
3. Hunt MJ, Salisbury ELC, Grace J, Armati R. Black breast milk due to minocycline therapy. Br J Dermatol. 1996;134:943-44. PubMed PMID: 8736342.

Substance Identification

Substance Name

Minocycline

CAS Registry Number

10118-90-8

Drug Class

Breast Feeding

Lactation

Anti-Infective Agents

Antibacterial Agents

Tetracyclines