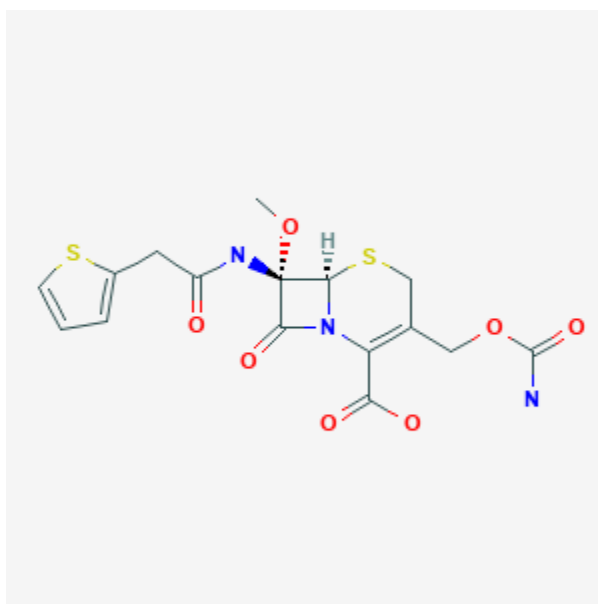




Cefoxitin

Revised: October 31, 2018.

CASRN: 35607-66-0



Drug Levels and Effects

Summary of Use during Lactation

Substantial information indicates that cefoxitin produces low levels in milk that are not expected to cause adverse effects in breastfed infants. Occasionally disruption of the infant's gastrointestinal flora, resulting in diarrhea or thrush have been reported with cephalosporins, but these effects have not been adequately evaluated. Cefoxitin is acceptable in nursing mothers.

Drug Levels

Maternal Levels. After a 1 gram dose of cefoxitin in one woman, the cefoxitin level in milk 2 hours after the dose was 5.6 mg/L.[1][2]

Four postpartum women received 1 gram of cefoxitin three times a day. Only 8 of 50 breastmilk samples had measurable cefoxitin levels of 0.8 to 1 mg/L. Other samples had unmeasurable (<0.8 mg/L) cefoxitin levels.[3]

Fifteen nursing others received a single intramuscular dose of cefoxitin 1 gram. Cefoxitin was not detected (<0.5 mg/L) in any milk samples taken up to 24 hours after the dose.[4]

After a single 2 gram intramuscular dose of cefoxitin in 5 women, peak milk levels of 0.31 to 0.65 mg/L occurred 1 to 5 hours after the dose.[5]

Cefoxitin was not measurable in breastmilk at any time up to 6 hours after a single 1 gram intravenous dose of cefoxitin in 2 women.[6]

Eighteen women undergoing cesarean section were given either a single 2 gram dose of cefoxitin or 2 g followed by two 1 gram doses (route unspecified). Cefoxitin was detected (detection limit 0.5 mg/L) in the milk of only one woman at a concentration of 0.9 mg/L 19 hours after the third dose of cefoxitin.[7]

Fifteen women were given a single 1 gram dose of cefoxitin intravenously at about 1 month after delivery. The average milk level 2 hours after the dose was 0.05 mg/L.[8]

Five women were who had been receiving intravenous cefoxitin 1 gram twice daily for 2 days following cesarean section each donated a milk sample. The highest milk concentration was 1.71 mg/L at 1 hour after the dose in one woman. Drug concentrations in samples taken at 1.5 or 2 hours after the dose in 3 women ranged from 0.71 to 0.94 mg/L. A fifth woman who donated a milk sample at 2.5 hours after the dose had a milk cefoxitin concentration of 0.57 mg/L.[9]

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

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

References

1. Geddes AM, Schnurr LP, Ball AP et al. Cefoxitin: a hospital study. *Br Med J.* 1977;1:1126-8. PubMed PMID: 861496.
2. Geddes AM, McGhie D, Ball AP et al. Studies with cefuroxime and cefoxitin. *Scand J Infect Dis.* 1978;13 (Suppl):78-81. PubMed PMID: 308260.
3. Santo GH, Huch A. Ubergang von cefoxitin in muttermilch. *Infection.* 1979;7(Suppl 1):S90-1.
4. Dubois M, Delapierre D, Chanteux L et al. A study of the transplacental transfer and the mammary excretion of cefoxitin in humans. *J Clin Pharmacol.* 1981;21:477-83. PubMed PMID: 7334140.
5. Dresse A, Lambotte R, Dubois M et al. Transmammary passage of cefoxitin: additional results. *J Clin Pharmacol.* 1983;23:438-40. PubMed PMID: 6643697.
6. Matsuda S. Transfer of antibiotics into maternal milk. *Biol Res Pregnancy.* 1984;5:57-60. PubMed PMID: 6743732.
7. Roex AJM, van Loenen AC, Puyenbroek JI et al. Secretion of cefoxitin in breast milk following short-term prophylactic administration in caesarean section. *Eur J Obstet Gynecol Reprod Biol.* 1987;25:299-302. PubMed PMID: 3653494.
8. Zhang Y, Zhang Q, Xu Z. [Tissue and body fluid distribution of antibacterial agents in pregnant and lactating women]. *Zhonghua Fu Chan Ke Za Zhi.* 1997;32(5):288-92. PubMed PMID: 9596854.

9. Kiriazopoulos E, Zaharaki S, Vonaparti A et al. Quantification of three beta-lactam antibiotics in breast milk and human plasma by hydrophilic interaction liquid chromatography/positive-ion electrospray ionization mass spectrometry. *Drug Test Anal.* 2017;9:1062-72. PubMed PMID: 27714984.

Substance Identification

Substance Name

Cefoxitin

CAS Registry Number

35607-66-0

Drug Class

Breast Feeding

Lactation

Anti-Infective Agents

Antibacterial Agents

Cephalosporins