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Tinidazole

Revised: March 17, 2021.

CASRN: 19387-91-8

Drug Levels and Effects

Summary of Use during Lactation

Amounts of tinidazole in milk are less than doses given to infants. Measurements of infant plasma levels during breastfeeding have not been reported. No studies have evaluated adverse effects of tinidazole on the infant during breastfeeding, but presumably they are similar to those of the closely related drug, metronidazole, such as increased risk of oral and rectal *Candida* infections.

As with metronidazole, concern has been raised about exposure of healthy infants to tinidazole via breastmilk, [1] because of possible mutagenicity and carcinogenicity. Opinions vary among experts on the advisability of using tinidazole during longer-term therapy while breastfeeding, but avoidance of breastfeeding for 3 days after

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a single dose should allow milk levels to drop to negligible values.[2] Other drugs are available for bacterial vaginosis, and can be given vaginally, which should result in lower amounts in breastmilk.

Drug Levels

Maternal Levels. Three women were given tinidazole 150 orally twice daily starting on day 4 postpartum. On day 7, milk samples were collected at 2, 5 and 9 hours after a dose. Breastmilk concentrations ranged between 5.8 and 12.7 mg/L.[3]

Twenty-four women who delivered by cesarean section were given a single intravenous dose of tinidazole 500 mg after cord clamping. Colostrum levels of tinidazole averaged 5.8 mg/L at 12 hours after the dose, 3.5 mg/L at 24 hours, 1.2 mg/L at 48 hours and 0.3 mg/L at 72 hours after the dose. The drug was barely detectable 96 hours after the dose. Only slight differences existed between concentrations in fore- and hindmilk.[4]

Five women who delivered by cesarean section were given a single intravenous dose of tinidazole 1600 mg after cord clamping. Milk concentrations and volumes were measured for 96 hours after the dose. The authors concluded that milk concentrations would be sufficiently low to commence breastfeeding 72 hours after the dose.[2]

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.

Alternate Drugs to Consider

(Anaerobic bacterial infections) Amoxicillin and Clavulanic Acid, Clindamycin, Doxycycline; (Bacterial Vaginosis) Clindamycin, Metronidazole; (Giardiasis) Metronidazole

References

- 1. American Academy of Pediatrics Committee on Drugs. The transfer of drugs and other chemicals into human milk. Pediatrics. 2001;108:776–89. PubMed PMID: 11533352.
- 2. Evaldson GR, Lindgren S, Nord CE, et al. Tinidazole milk excretion and pharmacokinetics in lactating women. Br J Clin Pharmacol. 1985;19:503–7. PubMed PMID: 4039599.
- 3. Wood BA, Faulkner JK, Monro AM. The pharmacokinetics, metabolism and tissue distribution of tinidazole. J Antimicrob Chemother. 1982;10 Suppl A:43–57. PubMed PMID: 7118775.
- 4. Männistö PT, Karhunen M, Koskela O, et al. Concentrations of tinidazole in breast milk. Acta Pharmacol Toxicol (Copenh). 1983;53:254–6. PubMed PMID: 6356785.

Substance Identification

Substance Name

Tinidazole

CAS Registry Number

19387-91-8

Tinidazole 3

Drug Class

Breast Feeding

Lactation

Anti-Infective Agents

Antibacterial Agents

Antiprotozoal Agents

Nitroimidazoles