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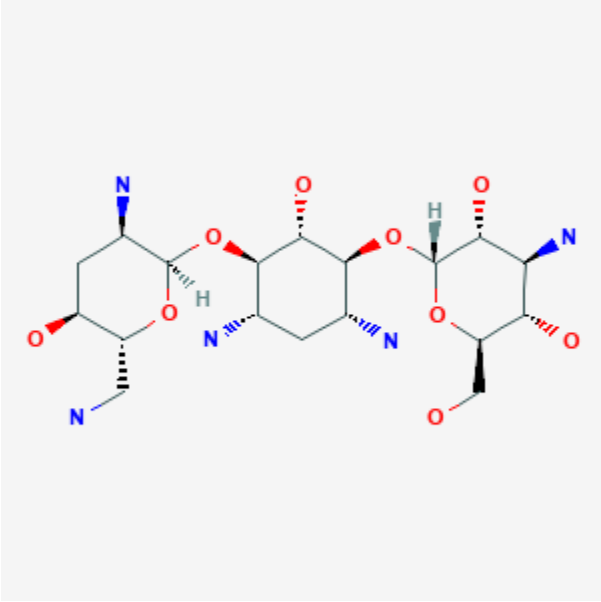
Tobramycin

Revised: October 31, 2018.

CASRN: 32986-56-4



Drug Levels and Effects

Summary of Use during Lactation

Tobramycin is poorly excreted into breastmilk. Newborn infants apparently absorb small amounts of other aminoglycosides, but serum levels with typical three times per day dosages are far below those attained when treating newborn infections and systemic effects of tobramycin are unlikely. Older infants would be expected to absorb even less tobramycin. Because there is little variability in the milk tobramycin levels during multiple daily dose regimens, timing breastfeeding with respect to the dose is of little or no benefit in reducing infant exposure. Data are not available with single daily dose regimens. Monitor the infant for possible effects on the gastrointestinal flora, such as diarrhea, candidiasis (e.g., thrush, diaper rash) or rarely, blood in the stool indicating possible antibiotic-associated colitis.

Maternal use of an ear drop or eye drop that contains tobramycin presents little or no risk for the nursing infant [4]

Drug Levels

Maternal Levels. After a single 80 mg intramuscular dose of tobramycin in 5 women, milk levels were measured every hour for 6 hours. Only trace levels were detected in 4 of the samples from 1 to 8 hours after the dose. In the fifth woman, milk levels ranged from 0.4 to 0.52 mg/L over 8 hours, with the highest level found at 4 hours after the dose.[2]

In one patient who received 80 mg of tobramycin every 8 hours by intramuscular injection, milk levels were 0.6 mg/L 1 hour after the dose and 0.58 mg/L 8 hours after the dose.[3]

At 2 months postpartum, a woman was receiving intravenous tobramycin 150 mg 3 times daily plus meropenem for cystic fibrosis. Four days after beginning, milk tobramycin levels were undetectable (<0.18 mg/L) before the infusion and in 6 milk samples take from 1 to 5 hours after the infusion.[4]

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

Effects in Breastfed Infants

An infant was breastfed (extent not stated) until the 4th month postpartum. At 2 months of age, his mother was given a 2-week course of tobramycin 150 mg three times daily plus meropenem for a cystic fibrosis exacerbation. infant displayed no change in stool pattern during the maternal treatment and had normal renal function at 6 months of age.[4][5]

Effects on Lactation and Breastmilk

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

References

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4. Festini F, Ciuti R, Taccetti G et al. Breast-feeding in a woman with cystic fibrosis undergoing antibiotic intravenous treatment. J Matern Fetal Neonatal Med. 2006;19:375-6. PubMed PMID: 16801316.
5. Festini F, Ciuti R, Repetto T et al. Safety of breast-feeding during an IV tobramycin course for infants of CF women. Pediatr Pulmonol Suppl. 2004;27:288-9. Abstract. DOI: 10.1002/ppul.20143.

Substance Identification

Substance Name

Tobramycin

CAS Registry Number

32986-56-4

Drug Class

Breast Feeding

Lactation

Anti-Infective Agents

Antibacterial Agents

Aminoglycosides