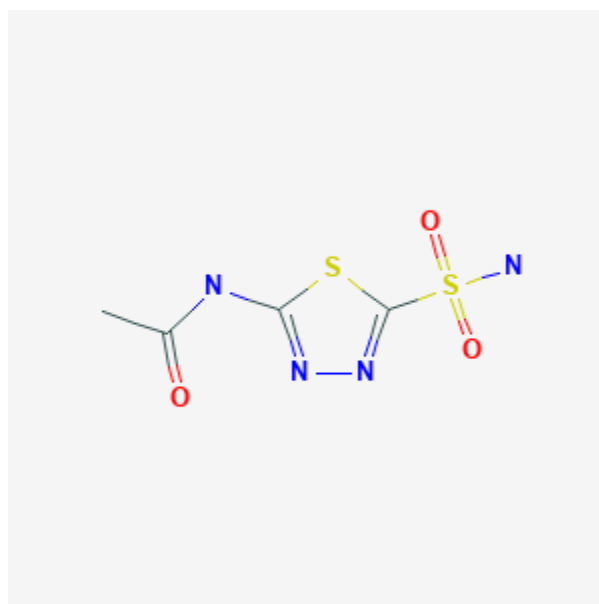




Acetazolamide

Revised: October 31, 2018.

CASRN: 59-66-5



Drug Levels and Effects

Summary of Use during Lactation

Limited information indicates that maternal doses of acetazolamide up to 1000 mg daily produce low levels in milk and would not be expected to cause any adverse effects in breastfed infants.

Drug Levels

Maternal Levels. A woman who was 6 days postpartum was given a sustained-release acetazolamide (Diamox Sequels) 500 mg twice daily by mouth for increased intraocular pressure. Milk acetazolamide levels ranged from 1.3 to 2.1 mg/L from 1 to 9 hours after the dose. The authors estimated that the infant received a daily dose of 0.6 mg, which was less than 0.7% of the maternal weight-adjusted dosage.[1]

Infant Levels. A 10-day old breastfed (extent not stated) infant whose mother was taking sustained-release acetazolamide (Diamox Sequels) 500 mg twice daily from day 6 postpartum. The infant's acetazolamide plasma levels were 0.2, 0.6 and 0.2 mg/L at 2, 3.5 and 12 hours after the maternal dose. These levels averaged 1.5% of 3 maternal plasma levels taken on the same day.[1]

Effects in Breastfed Infants

A breastfed (extent not stated) infant whose mother was taking sustained-release acetazolamide (Diamox Sequels) 500 mg twice daily exhibited no apparent adverse effects related to acetazolamide from day 6 to day 10 postpartum.[1]

A mother who was taking acetazolamide 250 mg orally twice daily as well as using 2 drops of timolol 0.5% eye drops daily and pilocarpine eye drops twice daily delivered a preterm infant at 36 weeks of gestation. The infant began 5 months of exclusive breastfeeding at 6 hours after birth. On day 2, the infant developed electrolyte abnormalities consisting of hypocalcemia, hypomagnesemia, and metabolic acidosis. The infant was treated with oral calcium gluconate and a single dose of intramuscular magnesium sulfate. Despite continued breastfeeding and maternal drug therapy, the infant's mild metabolic acidosis disappeared on day 4 of life and the infant was gaining weight normally at 1, 3 and 8 months, but had mild hypotonicity. The authors considered the metabolic effects to be caused by transplacental passage of acetazolamide that resolved despite the infant being breastfed. The infant gained weight adequately during breastfeeding, but had some mild, residual hypertonicity of the lower limbs requiring physical therapy.[2]

References

1. Soderman P, Hartvig P, Fagerlund C. Acetazolamide excretion into human breast milk. *Br J Clin Pharmacol.* 1984;17:599-600. Letter. PubMed PMID: 6733009.
2. Merlob P, Litwin A, Mor N. Possible association between acetazolamide administration during pregnancy and metabolic disorders in the newborn. *Eur J Obstet Gynecol Reprod Biol.* 1990;35:85-8. PubMed PMID: 2311821.
3. Bedrosian L, Erzurumlu K, Levine LS. Acetazolamide (Diamox) in the inhibition of postpartum breast engorgement. *N Y State J Med.* 1957;57:3997-8. PubMed PMID: 13493780.

Substance Identification

Substance Name

Acetazolamide

CAS Registry Number

59-66-5

Drug Class

Breast Feeding

Lactation

Anticonvulsants

Antiglaucoma Agents

Carbonic Anhydrase Inhibitors

Diuretics