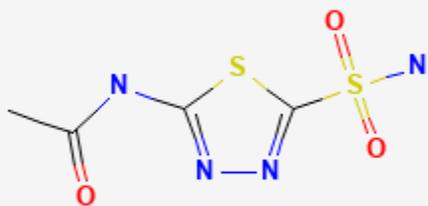




Acetazolamide

Revised: August 15, 2024.

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. American, Canadian and French professional guidelines consider carbonic anhydrase inhibitors acceptable in breastfeeding.[1,2]

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

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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.[3]

A woman was treated with acetazolamide for pseudotumor cerebri with acetazolamide 500 mg three times daily during pregnancy and postpartum. Her infant was born with metabolic acidosis which resolved in 6 hours after birth and hypochloremia resolved within 24 hours. Breastmilk acetazolamide concentration was 4.2 mg/L in the first 2 days postpartum. A second mother reported in the same paper was also being treated for pseudotumor cerebri with acetazolamide 500 mg three times daily during pregnancy. Her breastmilk contained acetazolamide 4.2 mg/L within 2 to 3 days after delivery.[4]

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.[3]

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.[3]

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 resolved 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.[5]

Two women were receiving acetazolamide during pregnancy and postpartum for pseudotumor cerebri. Their infants had metabolic acidosis after birth. Both infants resolved their metabolic acidosis despite receiving maternal breastmilk.[4]

Effects on Lactation and Breastmilk

A randomized, partially blinded trial compared acetazolamide 1 tablet (presumably 250 mg) by mouth daily, diethylstilbestrol 0.5 mg twice daily, placebo once daily and routine care in 243 mothers who wished to not breastfeed. Pain and breast fullness were assessed at least daily by blinded observers. In this dosage, acetazolamide was no more effective than placebo and somewhat less effective than diethylstilbestrol in relieving discomfort.[6]

References

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Substance Identification

Substance Name

Acetazolamide

CAS Registry Number

59-66-5

Drug Class

Breast Feeding

Lactation

Milk, Human

Anticonvulsants

Antiglaucoma Agents

Carbonic Anhydrase Inhibitors

Diuretics