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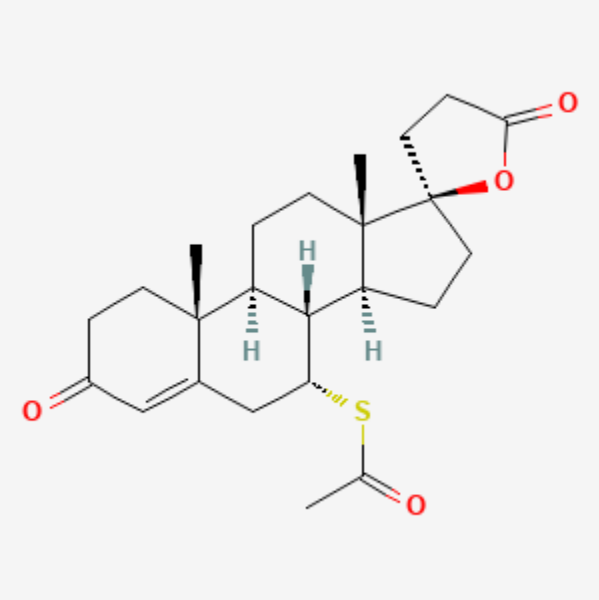
Spironolactone

Revised: November 15, 2023.

CASRN: 52-01-7



Drug Levels and Effects

Summary of Use during Lactation

Limited data indicate that spironolactone is poorly excreted into breastmilk. Case of mothers breastfeeding during spironolactone therapy reported no adverse effects in infants. Spironolactone appears to be acceptable to use during breastfeeding.

Drug Levels

Maternal Levels. The major metabolite of spironolactone, canrenone, was measured in the serum and milk of a 17-day postpartum woman who was taking 25 mg of spironolactone four times daily. Milk canrenone levels 2 hours after the dose were 104 mcg/L, and 47 mcg/L at 14.5 hours after the dose. The authors estimated that the

nursing infant would receive about 0.2% of the mother's total daily dosage in the form of canrenone.[1] Active sulfur-containing metabolites were not measured.

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

Effects in Breastfed Infants

In 17-day-old breastfed (extent not stated) infant whose mother was taking 25 mg of spironolactone 4 times daily since pregnancy, serum sodium and potassium remained normal.[1]

Spironolactone 75 mg every other day was taken orally by a mother while nursing a newborn. She was also taking 400 mg of bretylium tosylate every 8 hours, atenolol 25 mg daily, propranolol 20 mg 3 times a day, and multivitamin, potassium and magnesium supplements. Jaundice, thought to be unrelated to the drug, occurred at 60 hours of age, but resolved. The infant had appropriate weight gain and development during the first 4 months of life.[2]

A transgender woman took and spironolactone 50 mg twice daily to suppress testosterone, domperidone 10 mg three times daily, increasing to 20 mg four times daily, oral micronized progesterone 200 mg daily and oral estradiol to 8 mg daily and pumped her breasts 6 times daily to induce lactation. After 3 months of treatment, estradiol regimen was changed to a 0.025 mg daily patch and the progesterone dose was lowered to 100 mg daily. Two weeks later, she began exclusively breastfeeding the newborn of her partner. Breastfeeding was exclusive for 6 weeks, during which the infant's growth, development and bowel habits were normal. The patient continued to partially breastfeed the infant for at least 6 months.[3]

A woman with Gitleman syndrome took spironolactone in an unspecified dosage along with potassium and magnesium supplements for at least 4 months while breastfeeding her infant. No adverse infant effects were reported.[4]

Effects on Lactation and Breastmilk

Intense diuresis can suppress lactation;[5,6] however, it is unlikely that spironolactone alone is sufficiently potent to cause this effect.

Spironolactone can cause gynecomastia. The estimated risk is 52 cases per 1000 patients treated, which is 8.4 times the baseline risk.[7]

A transgender woman was taking sublingual estradiol 4 mg twice daily, spironolactone 100 mg twice daily and progesterone 200 mg at bedtime for gender-affirming therapy. In order to prepare for the birth of the infant being carried by her partner, sublingual estradiol was increased to 6 mg twice daily and progesterone was increased to 400 mg at bedtime. Domperidone 10 mg twice daily was also started to increase serum prolactin levels and later increased to 20 mg 4 times daily. Before the delivery date, progesterone was stopped, spironolactone was decreased to 100 mg daily and estradiol was changed to 25 mcg per day transdermally. At day 59 postpartum, estradiol was changed to 2 mg per day sublingually and spironolactone was increased to 100 mg twice daily. The patient was able to produce up to 240 mL of milk daily containing typical macronutrient and oligosaccharide levels.[8]

References

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Substance Identification

Substance Name

Spironolactone

CAS Registry Number

52-01-7

Drug Class

Breast Feeding

Lactation

Milk, Human

Antihypertensive Agents

Diuretics

Mineralocorticoid Receptor Antagonists