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Calcitonin

Revised: December 3, 2018.

CASRN: 9007-12-9; 47931-85-1; 21215-62-3



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Drug Levels and Effects

Summary of Use during Lactation

Little information is available on the clinical use of calcitonin during breastfeeding; however, calcitonin is a normal component of human milk where may play a role in development of enteric neurons in the breastfed infant.[1][2][3] Because it is a large peptide, absorption by the infant is unlikely because it is probably destroyed in the infant's gastrointestinal tract. If calcitonin is required by the mother, it is not a necessarily reason to discontinue breastfeeding Calcitonin therapy is sometimes used to treat symptomatic postpartum osteoporosis, which is often treated in part by stopping lactation to reduce calcium loss.[4][5] There is no evidence that exogenous calcitonin decreases serum prolactin or lactation in nursing mothers.

Drug Levels

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

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

Effects in Breastfed Infants

A woman with discoid lupus was taking subcutaneous calcitonin 0.5 mL every other day, azathioprine 100 mg/ day, warfarin 2.5 mg every other day, prednisone 10 mg/day, calcitriol 0.25 mcg every 2 days, acetaminophen 650 mg twice daily, and calcium, vitamin E, and vitamin C. She was specifically evaluated for the safety of azathioprine during lactation, but continued to nurse for 12 months. Infant follow-up at 15 months of age found normal growth and development.[6]

Effects on Lactation and Breastmilk

Calcitonin products contain a warning that it should be avoided in nursing mothers because of animal data indicating that calcitonin can lower serum prolactin. The only human data consist of small studies performed in men and nonlactating w omen, some with normal and some with elevated serum prolactin. Several of the studies found a decrease in serum prolactin after calcitonin infusion.[7][8][9][10] Another small study found that IV infusion of human calcitonin did not lower serum prolactin in healthy volunteers who had normal serum prolactin at baseline.[11] The prolactin level in a mother with established lactation may not affect her ability to breastfeed.

References

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Substance Identification

Substance Name

Calcitonin

CAS Registry Number

9007-12-9; 47931-85-1; 21215-62-3

Drug Class

Breast Feeding

Lactation

Bone Density Conservation Agents

Neuropeptides

Peptide Hormones