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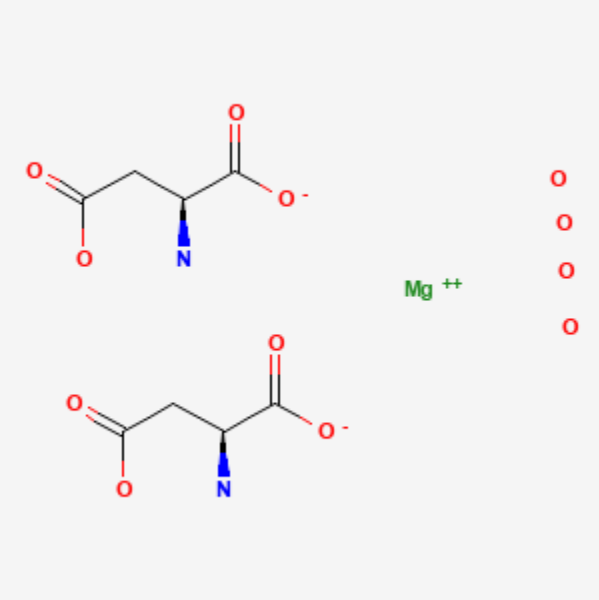
Magnesium Aspartate

Revised: January 15, 2024.

CASRN: 7018-07-7



Drug Levels and Effects

Summary of Use during Lactation

No information is available on the excretion of magnesium following magnesium aspartate during breastfeeding. However, other magnesium salts have been studied. Intravenous magnesium sulfate increases milk magnesium concentrations only slightly. Oral absorption of magnesium by the infant is poor, so maternal magnesium aspartate is not expected to affect the breastfed infant's serum magnesium. Magnesium aspartate supplementation during pregnancy might delay the onset of lactation, but it can be taken during breastfeeding and no special precautions are required.

Drug Levels

Maternal Levels. Ten women with pre-eclampsia were given 4 grams of magnesium sulfate intravenously followed by 1 gram per hour until 24 hours after delivery. While the average serum magnesium was 35.5 mg/L in treated women compared to 18.2 mg/L in 5 untreated controls, colostrum magnesium levels at the time of discontinuation of the infusion were 64 mg/L in treated women and 48 mg/L in the controls. By 48 hours after discontinuation, colostrum magnesium levels were only slightly above control values and by 72 hours they were virtually identical to controls.[1]

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

Effects in Breastfed Infants

Fifty mothers who were in the first day postpartum received 15 mL of either mineral oil or an emulsion of mineral oil and another magnesium salt, magnesium hydroxide equivalent to 900 mg of magnesium hydroxide, although the exact number who received each product was not stated. Additional doses were given on subsequent days if needed. None of the breastfed infants were noted to have any markedly abnormal stools, but all of the infants also received supplemental feedings.[2]

Effects on Lactation and Breastmilk

One mother who received intravenous magnesium sulfate for 3 days for pregnancy-induced hypertension had lactogenesis II delayed until day 10 postpartum. No other specific cause was found for the delay, although a complete work-up was not done.[3] A subsequent controlled clinical trial found no evidence of delayed lactation in mothers who received intravenous magnesium sulfate therapy.[4] Some, but not all, studies have found a trend toward increased time to the first feeding or decreased sucking in infants of mothers treated with intravenous magnesium sulfate during labor because of placental transfer of magnesium to the fetus.[4,5]

A study in 40 pairs of matched healthy women with vaginally delivered singleton pregnancies, outcome endpoints were compared in those receiving continuous oral magnesium aspartate HCl supplementation mean dose of 459 mg daily (range 365 to 729 mg of magnesium daily) for at least 4 weeks before delivery versus non-supplemented controls. In the magnesium group, significantly fewer women could breastfeed their infants exclusively at discharge (63% vs 80%).[6]

References

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4. Riaz M, Porat R, Brodsky NL, Hurt H. The effects of maternal magnesium sulfate treatment on newborns: A prospective controlled study. J Perinatol 1998;18:449-54. PubMed PMID: 9848759.
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Substance Identification

Substance Name

Magnesium Aspartate

CAS Registry Number

7018-07-7

Drug Class

Breast Feeding

Lactation

Milk, Human

Magnesium Compounds

Minerals