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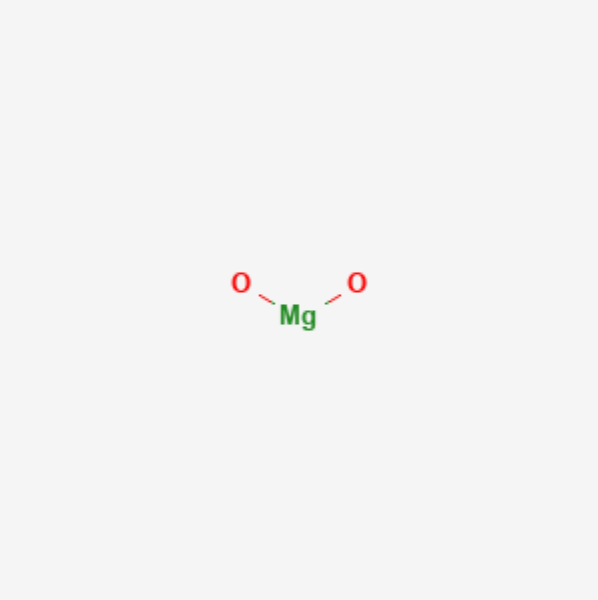
Magnesium Hydroxide

Revised: October 31, 2018.

CASRN: 1309-42-8



Drug Levels and Effects

Summary of Use during Lactation

A study on the use of magnesium hydroxide during breastfeeding found no adverse reactions in breastfed infants. Intravenous magnesium increases milk magnesium concentrations only slightly. Oral absorption of magnesium by the infant is poor, so maternal magnesium hydroxide is not expected to affect the breastfed infant's serum magnesium. Magnesium hydroxide 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 was 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 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]

Alternate Drugs to Consider

Bisacodyl, Docusate, Psyllium, Sodium Picosulfate, Sodium Phosphate

References

1. Cruikshank DP, Varner MW, Pitkin RM. Breast milk magnesium and calcium concentrations following magnesium sulfate treatment. Am J Obstet Gynecol. 1982;143:685-8. PubMed PMID: 7091241.
2. Baldwin WF. Clinical study of senna administration to nursing mothers. Can Med Assoc J. 1963;89:566-7.
3. Haldeman W. Can magnesium sulfate therapy impact lactogenesis? J Hum Lact. 1993;9:249-52. PubMed PMID: 8260059.
4. Riaz M, Porat R, Brodsky NL et al. The effects of maternal magnesium sulfate treatment on newborns: a prospective controlled study. J Perinatol. 1998;18:449-54. PubMed PMID: 9848759.
5. Rasch DK, Huber PA, Richardson CJ et al. Neurobehavioral effects of neonatal hypermagnesemia. J Pediatr. 1982;100:272-6. PubMed PMID: 7199083.
6. Meier B, Huch R, Zimmermann R et al. Does continuing oral magnesium supplementation until delivery affect labor and puerperium outcome? Eur J Obstet Gynecol Reprod Biol. 2005;123:157-61. PubMed PMID: 15899543.

Substance Identification

Substance Name

Magnesium Hydroxide

CAS Registry Number

1309-42-8

Drug Class

Breast Feeding

Lactation

Antacids

Cathartics

Gastrointestinal Agents

Magnesium Compounds