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Dialysis

Revised: December 3, 2018.

Drug Levels and Effects

Summary of Use during Lactation

There appear to be no contraindications to breastfeeding by mothers who are on dialysis, although there are few reported cases. Analysis of breastmilk indicates that the predialysis milk concentrations of some solutes are abnormal. Authors who managed one patient suggest that breastfeeding after hemodialysis might be preferable to breastfeeding before hemodialysis and milk pumped just before dialysis should be discarded.[1]

Effects in Breastfed Infants

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

Effects on Lactation and Breastmilk

Hyperprolactinemia is a well-known complication of chronic kidney disease.[2][3][4] Hyperprolactinemia can cause effects such as galactorrhea and hypertension. Dopaminergic agonists such as bromocriptine and cabergoline have been used to counteract these effects.[5][6] The prolactin level in a mother with established lactation may not affect her ability to breastfeed.

A mother with end-stage renal disease receiving hemodialysis 3 times weekly partially breastfed her infant for 10 weeks postpartum. Breastmilk samples were collected at various times between day 10 and week 10 postpartum. Sodium and chloride concentrations in breastmilk were higher than in 6 control women without kidney disease, but sodium, chloride, potassium and magnesium in breastmilk were similar pre- and post-dialysis. Phosphate concentration in breastmilk was lower than normal and the mother partially fed her infant with a high-phosphate formula to compensate. Urea, creatinine, and uric acid were higher in breastmilk than in controls, but all were reduced by dialysis; urea levels in breastmilk were normal in post-dialysis samples. Although glucose levels in breastmilk were lower in the patient's milk than in control milk, it was not different pre- and post-dialysis. Protein, triglycerides, cholesterol and immunoglobulins were similar to control milk and were not affected by dialysis. The authors suggest that breastfeeding after a dialysis session is preferable to breastfeeding prior to a dialysis session. They instructed the mother to discard milk pumped immediately prior to dialysis.[1]

References

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Substance Identification

Substance Name

Dialysis

Drug Class

Breast Feeding

Lactation

Renal Dialysis