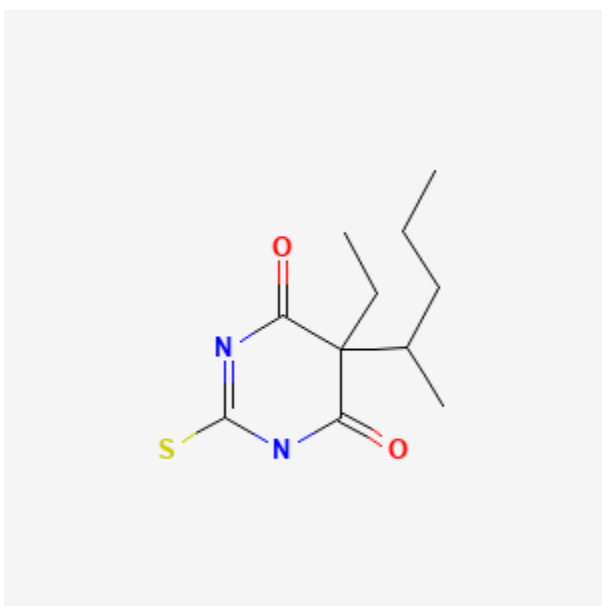




Thiopental

Revised: February 15, 2023.

CASRN: 76-75-5



Drug Levels and Effects

Summary of Use during Lactation

Amounts of thiopental in milk are very small. Existing data indicate that no waiting period is required before resuming breastfeeding after thiopental anesthesia. Breastfeeding can be resumed as soon as the mother has recovered sufficiently from general anesthesia to nurse.[1,2] When a combination of anesthetic agents is used for a procedure, follow the recommendations for the most problematic medication used during the procedure. Monitor the infant for sedation, poor feeding and poor weight gain.

Disclaimer: Information presented in this database is not meant as a substitute for professional judgment. You should consult your healthcare provider for breastfeeding advice related to your particular situation. The U.S. government does not warrant or assume any liability or responsibility for the accuracy or completeness of the information on this Site.

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Drug Levels

Maternal Levels. A woman was given a continuous infusion of thiopental sodium. During the infusion and 25 minutes after its initiation and about 800 mg had been given, a milk level of 7.5 mg/L was measured. A second milk sample taken 14 minutes after completion of the infusion of a total of 1125 mg contained 20 mg/L.[3] The accuracy and specificity of this old analytic technique were not well defined.

Four women who received intravenous thiopental for anesthesia induction prior to cesarean section had breastmilk samples taken on days 1 and 2 postpartum. Exact doses were not specified, but were in the range of 200 to 500 mg. The average milk concentrations were 1.96 mg/L on day 1 and 0.55 mg/L on day 2.[4]

Eight women admitted for cesarean section were given an average of 5 mg/kg (range 3.8 to 6.3 mg/kg) of intravenous thiopental for induction of anesthesia. The highest colostrum level occurred in the first nursing after the termination of anesthesia (about 4 hours after the dose) and was estimated to be 0.34 mg/L. Eight other women who were at least 2 weeks postpartum were given an average of 5.4 mg/kg (range 4.4 to 7 mg/kg) of intravenous thiopental for induction of anesthesia. The highest milk level occurred in the first nursing after the termination of anesthesia (about 4 hours after the dose) and was estimated to be 0.9 mg/L. The authors concluded that the doses received by the infant were negligible and unlikely to affect the infant.[1]

Twenty women undergoing cesarean section received 5 mg/kg of thiopental intravenously for induction of anesthesia. Average colostrum levels were 1.98 mg/L (range 0.6 to 4.7 mg/L) at 30 minutes, 0.91 mg/L (range 0.4 to 1.9 mg/L) at 4 hours, and 0.59 mg/L (range 0.3 to 1.4 mg/L) at 9 hours after the end of the dose.[5]

Infant Levels. Seven mothers received intravenous thiopental for anesthesia induction prior to cesarean section. The half-lives of the drug were calculated in their infants from urinary excretion data. The breastfed infants excreted an average of 0.0067% of the maternal dose in their urine while the nonbreastfed infants excreted an average of 0.008% in their urine. The half-life of thiopental in the 4 infants who were breastfed was not different from that of the 3 formula-fed infants. These findings indicate that trivial amounts of thiopental are received in breastmilk by infants in the first 2 days of life after administration to their mothers during delivery.[4]

Effects in Breastfed Infants

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

Effects on Lactation and Breastmilk

A randomized, but nonblinded, study in women undergoing cesarean section compared epidural anesthesia with bupivacaine to general anesthesia with intravenous thiopental 4 mg/kg and succinylcholine 1.5 mg/kg for induction followed by nitrous oxide and isoflurane. The time to the first breastfeed was significantly shorter (107 vs 228 minutes) with the epidural anesthesia than with general anesthesia. This difference was probably caused by the anesthesia's effects on the infant, because the Apgar and neurologic and adaptive scores were significantly lower in the general anesthesia group of infants.[6]

Alternate Drugs to Consider

Dexmedetomidine, Etomidate, Methohexital, Propofol

References

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Substance Identification

Substance Name

Thiopental

CAS Registry Number

76-75-5

Drug Class

Breast Feeding

Lactation

Milk, Human

Anesthetics, Intravenous

Hypnotics and Sedatives