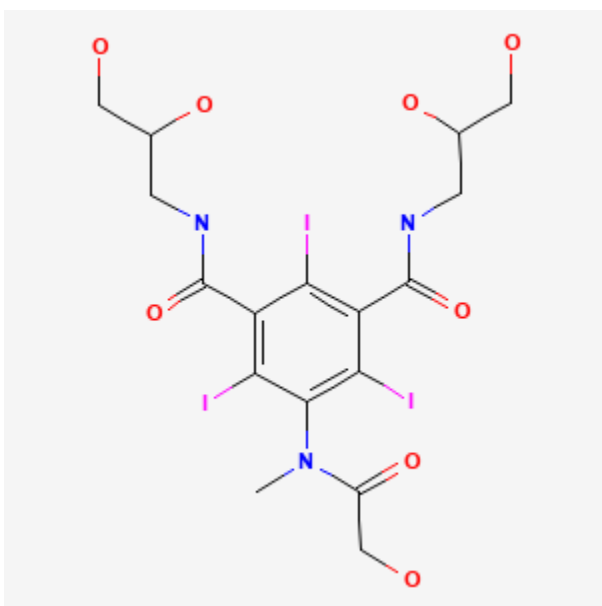




Iomeprol

Revised: November 30, 2022.

CASRN: 78649-41-9



Drug Levels and Effects

Summary of Use during Lactation

Iomeprol is not approved for marketing in the United States by the U.S. Food and Drug Administration, but is available in other countries. Labeling for the drug in the United Kingdom and guidelines developed by several professional organizations state that breastfeeding need not be disrupted after a nursing mother receives an iodine-containing contrast medium such as iomeprol.[1-4]

Drug Levels

Maternal Levels. Four mothers who were 1 week to 14 months postpartum received iohexol by rapid intravenous injection. Three received a dose of 50 mL (37.8 grams; 17.5 grams of iodine) and one received 60 mL (45.3

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grams; 21 grams of iodine). Milk samples of 10 mL were collected 9 times over the 48 hours after the injection. The average iohexol milk concentration over the first 24 hours was 24.6 mg/L in the 3 women 1 week to 4 months postpartum and 130.5 mg/L in the one woman who was 14 months postpartum and weaning her infant. The authors calculated that the average amount of iohexol received by the first 3 infants over the first 24 hours would be 3.7 mg/kg or 0.5% of the weight-adjusted maternal dosage.[5]

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

Effects in Breastfed Infants

A preterm infant, born at 31 weeks 4 days, was noted at 17 days of age to have a markedly elevated thyrotropin (TSH) value of 87.6 mUI/L (normal range: 0.27 to 4.20 mUI/L). TSH had been normal at birth. Thyroglobulin was also elevated at 811 ng/mL (normal range: 3.5 to 77 ng/mL), but free T4 was normal. The infant had been breastfed (extent not stated) from birth, but also received partial parenteral nutrition until day 10 of life. The infant's mother had received iomeprol in a dose of 350 mg/kg of iodine at day 4 postpartum and discontinued breastfeeding for 24 hours after the dose. The mother had a history of subclinical hypothyroidism and was treated with levothyroxine.[6] The infant's transient hypothyroidism, indicated by elevations in TSH and thyroglobulin, was probably caused by the iodine in milk from the contrast medium.

Effects on Lactation and Breastmilk

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

Alternate Drugs to Consider

Diatrizoate

References

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2. Chen MM, Coakley FV, Kaimal A, et al. Guidelines for computed tomography and magnetic resonance imaging use during pregnancy and lactation. *Obstet Gynecol.* 2008;112:333–40. PubMed PMID: 18669732.
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5. Nielsen ST, Matheson I, Rasmussen JN, et al. Excretion of iohexol and metrizoate in human breast milk. *Acta Radiol.* 1987;28:523–6. PubMed PMID: 2960342.
6. Themelin C, Pierron C, Calafat JF, et al. Transient neonatal hypothyroidism secondary to postnatal maternal exposure to contrast medium. *BMJ Case Rep.* 2019;12:e230854.

Substance Identification

Substance Name

Iomeprol

CAS Registry Number

78649-41-9

Drug Class

Breast Feeding

Lactation

Milk, Human

Contrast Media

Diagnostic Agents