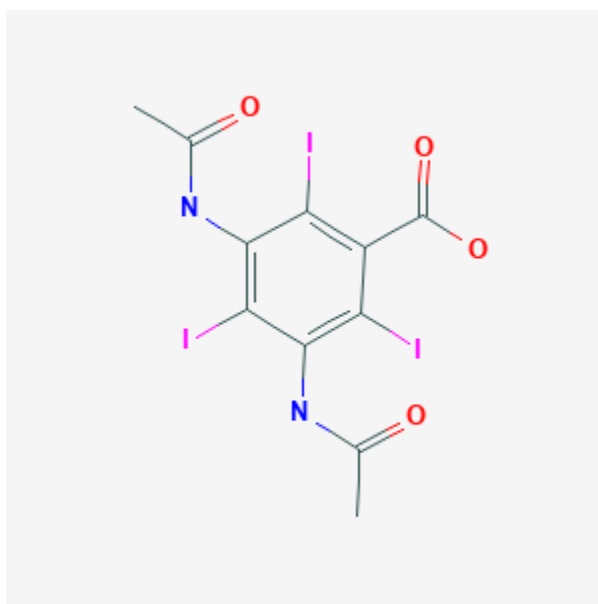




## Diatrizoate

Revised: October 31, 2018.

CASRN: 117-96-4



## Drug Levels and Effects

### Summary of Use during Lactation

Limited information indicates that maternal doses of diatrizoate up to 38 g (containing 18.5 grams of iodine) produce low levels in milk. In addition, because diatrizoate is poorly absorbed orally, it is not likely to reach the bloodstream of the infant or cause any adverse effects in breastfed infants. Guidelines developed by several professional organizations state that breastfeeding need not be disrupted after a nursing mother receives a iodine-containing contrast medium.[1][2][3][4]

### Drug Levels

A woman who was 10 days postpartum received diatrizoate meglumine intravenously in a dose equivalent to 306 mg of iodine for phlebography. Bound iodine (presumably diatrizoate and any metabolites) in breastmilk was measured. Iodine was not found in the breastmilk until 2.25 hours after the dose when a concentration of 20

mg/L was detected. At 7 hours, a peak concentration of 22 mg/L occurred. Breastmilk iodine concentrations dropped after that until the concentration was 7.4 mg/L at 27 hours after the dose.[5]

One woman who was 7 weeks postpartum received 50 mL of an iodinated contrast medium containing 38 grams of sodium and meglumine salts of diatrizoate by rapid intravenous injection for urography (intravenous pyelogram; IVP). The total dose of iodine in this dose was 18.5 grams. Milk samples were expressed at 6, 9, 13 and 16.5 hours after the dose. Diatrizoate was undetectable (<2 mg/L) in any of the milk samples.[6]

A woman received 300 mL of sodium and meglumine salts of diatrizoate by intravenous injection for pulmonary angiography for a suspected pulmonary embolism 48 hours after delivery by cesarean section. This dose contained a total of 93 grams of iodine. All milk produced for the next 5 days (collection method not stated) was saved for analysis. The total amount of iodine excreted into milk during the first 24 hours after the dose was 31 mg or 0.03% of the dose administered. On the second and third days after administration, 0.008% (7.6 mg) and 0.0005% (0.5 mg), respectively, of the iodine dose was excreted in milk. By day 5, the concentration of iodine in milk was 119 mcg/L, compared to the mean of 70 mcg/L in 200 samples of normal breastmilk in the same laboratory.[7]

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

## Effects in Breastfed Infants

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

## Effects on Lactation and Breastmilk

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

## Alternate Drugs to Consider

Iohexol

## References

1. American College of Radiology Committee on Drugs and Contrast Media. Administration of contrast media to breast-feeding mothers. In, ACR manual on contrast media. 2017;Version 10.3:102-3. Available at: <https://www.acr.org/~media/37D84428BF1D4E1B9A3A2918DA9E27A3.pdf>
2. Webb JA, Thomsen HS, Morcos SK, Members of Contrast Media Safety Committee of European Society of Urogenital Radiology (ESUR). The use of iodinated and gadolinium contrast media during pregnancy and lactation. *Eur Radiol.* 2005;15:1234-40. PubMed PMID: 15609057.
3. Chen MM, Coakley FV, Kaimal A, Laros RK Jr. Guidelines for computed tomography and magnetic resonance imaging use during pregnancy and lactation. *Obstet Gynecol.* 2008;112:333-40. PubMed PMID: 18669732.
4. Committee Opinion No. 723: Guidelines for Diagnostic Imaging During Pregnancy and Lactation. *Obstet Gynecol.* 2017;130:e210-e216. PubMed PMID: 28937575.
5. Weyrauch U, Volkhardt V, Speck U. [Transfer of amidotrizoate in maternal milk following phlebography in a patient 10 days post partum]. *Rofo.* 1977;127:275-6. PubMed PMID: 143435.
6. FitzJohn TP, Williams DG, Laker MF, Owen JP. Intravenous urography during lactation. *Br J Radiol.* 1982;55:603-5. PubMed PMID: 7116094.
7. Texier F, Roque D'Orbcastel O, Etling N. [Stable iodine level in human milk after pulmonary angiography]. *Presse Med (Paris).* 1983;19:769. Letter. PubMed PMID: 6220321.

## **Substance Identification**

### **Substance Name**

Diatrizoate

### **CAS Registry Number**

117-96-4

### **Drug Class**

Breast Feeding

Lactation

Contrast Media

Diagnostic Agents