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Ioflupane I 123

Revised: October 15, 2023.

CASRN: 155798-07-5

Drug Levels and Effects

Summary of Use during Lactation

Information in this record refers to the use of ioflupane I 123 as a diagnostic agent. The Society of Nuclear Medicine recommends that breastfeeding be interrupted for at least 1 day and possibly up to 6 days following tracer doses of ioflupane I 123;[1] the manufacturer states that breastfeeding should be interrupted for 6 days after administration of ioflupane I 123 to a nursing mother. However, this time period is based on the presumption that I 123 is contaminated with other iodine isotopes, which is no longer the case.[2] A shorter time might be appropriate. During the period of interruption, the breasts should be emptied regularly and completely. If the mother has expressed and saved milk prior to the examination, she can feed it to the infant during the period of nursing interruption.[3-5] The milk that is pumped by the mother during the time of

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breastfeeding interruption can either be discarded or stored refrigerated and given to the infant after 10 physical half-lives, or about 5.5 days, have elapsed since pumping.

Mothers concerned about the level of radioactivity in their milk could ask to have it tested at a nuclear medicine facility at their hospital. When the radioactivity is at a safe level, she may resume breastfeeding. A method for measuring milk radioactivity and determining the time when a mother can safely resume breastfeeding has been published.[6]

Drug Levels

I 123 is a gamma emitter with a photon energy of 159 keV and a physical half-life of 13.1 hours.[2]

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.

References

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- 3. Mountford PJ, Coakley AJ. A review of the secretion of radioactivity in human breast milk: Data, quantitative analysis and recommendations. Nucl Med Commun 1989;10:15-27. PubMed PMID: 2645546.
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- 5. ARSAC notes for guidance: Good clinical practice in nuclear medicine. Notes for guidance on the clinical administration of radiopharmaceuticals and use of sealed radioactive sources. 2020. Available at: https://www.gov.uk/government/publications/arsac-notes-for-guidance
- 6. Stabin MG, Breitz HB. Breast milk excretion of radiopharmaceuticals: Mechanisms, findings, and radiation dosimetry. J Nucl Med 2000;41:863-73. PubMed PMID: 10809203.

Substance Identification

Substance Name

Ioflupane I 123

CAS Registry Number

155798-07-5

Drug Class

Breast Feeding

Lactation

Ioflupane I 123

Milk, Human

Radiop harm aceuticals

Iodine Radioisotopes

Diagnostic Agents