

CLINICAL PRACTICE GUIDELINES

ADMINISTRATION OF INTRAVENOUS CONTRAST IN PATIENTS WHO ARE BREASTFEEDING



Objective:

To provide safe care to patients who receive intravenous contrast injections in Medical Imaging.

Guideline:

Certain medical imaging studies which require either iodinated or gadolinium-based contrast media are occasionally required in patients who are breast feeding. Both the patient and the patient's health care provider may have concerns regarding potential toxicity to the infant from contrast media that is excreted into the breast milk.

Iodinated Contrast

Because of its low lipid solubility, less than 1% of the administered maternal dose of iodinated contrast medium is excreted into the breast milk in the first 24 hours. In addition, less than 1% of the contrast medium ingested by the infant is absorbed from its gastrointestinal tract. Therefore, the expected dose absorbed by the infant from the breast milk is less than **0.01%** of the intravascular dose given to the mother. This amount represents less than 1% of the recommended dose for an infant if it were to be prescribed iodinated contrast material related to an imaging study.

Gadolinium-Based Contrast

Less than 0.04% of the dose given to the mother is excreted into the breast milk in the first 24 hours. Because less than 1% of the contrast medium ingested by the infant is absorbed from its gastrointestinal tract, the expected dose absorbed by the infant from the breast milk is less than **0.0004%** of the dose given to the mother. This ingested amount is far less than the permissible dose for intravenous use in neonates. The likelihood of an adverse effect from such a minute fraction of gadolinium chelate absorbed from breast milk is remote.

Potential Risks:

The potential risks to the infant include direct toxicity and allergic sensitization or reaction. However, these are theoretical concerns and have not been reported.

Recommendation:

Because of the very small percentage of iodinated and gadolinium-based contrast medium that is excreted into the breast milk and hence absorbed by the infant's gut, we suggest that it is safe for the mother and infant to continue breast-feeding after receiving such an agent.

However, ALL breastfeeding mothers have the right to make an informed decision as to whether to continue or temporarily abstain from breastfeeding after receiving contrast. If a mother is concerned about any risk to the infant, she can abstain from breastfeeding for 24 hours and express and discard her breast milk from both breasts during that period. She also has the right to delay the procedure until she has opportunity to pump milk to feed the infant during the 24 hour period following the exam.

References:

American College of Radiology Manual on Contrast Media. 2021.
file:///C:/Users/nicole.jenkins/AppData/Local/Microsoft/Windows/INetCache/Content.Outlook/KPS0VW75/Contrast_Media%20ACR%202021.pdf

