

**American College of Radiology (ACR) Recommendations  
For Women who are Breast Feeding and having Gadolinium contrast Media Administered**

***Gadolinium-Based Contrast Agents***

***Background***

Like iodinated contrast media, gadolinium-based contrast media have a plasma half-life of approximately 2 hours and are nearly completely cleared from the bloodstream in patients with normal renal function within 24 hours. Also similar to iodinated contrast media, gadolinium-based contrast media are excreted into the breast milk. It is likely that the overwhelming bulk of gadolinium excreted in the breast milk is in a stable and chelated form.

Less than 0.04% of the intravascular dose given to the nursing 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 systemic dose absorbed by the infant from the breast milk is less than 0.0004% of the intravascular dose given to the patient. 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. However, the potential risks to the infant include direct toxicity (including toxicity from free gadolinium, because it is unknown how much, if any, of the gadolinium in breast milk is in the unchelated form) and allergic sensitization or reaction. These are theoretical concerns but none of these complications have been reported. As in the case with iodinated contrast medium, the taste of the milk may be altered if it contains a gadolinium-based contrast medium.

***Recommendation***

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

Ultimately, an informed decision to temporarily stop breast-feeding should be left up to the mother after these facts are communicated. If the mother remains concerned about any potential ill effects to the infant, she may abstain from breast-feeding from the time of contrast administration for a period of 12 to 24 hours. There is no value to stop breast-feeding beyond 24 hours. The mother should be told to express and discard breast milk from both breasts after contrast administration until breast feeding resumes. In anticipation of this, the nursing mother may wish to use a breast pump to obtain milk before the contrast-enhanced study to feed the infant during the 24- hour period following the examination.

[https://www.acr.org/-/media/ACR/files/clinical-resources/contrast\\_media.pdf](https://www.acr.org/-/media/ACR/files/clinical-resources/contrast_media.pdf)

If you have any further questions, please contact your referring physician or you may contact Shields at 800-258-4674 and ask to speak with a technologist.