

Radiocontrast and Breastfeeding

MotherSafe - Royal Hospital for Women

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Information in this leaflet is general in nature and should not take the place of advice from your healthcare provider. Breastmilk provides optimum nutrition for babies and conveys many additional health benefits to mother and baby.

Women who are breastfeeding may sometimes require investigations such as CT and MRI scans. These investigations may require the use of a type of dye known as radiocontrast which can improve visibility in diagnostic imaging. Radiocontrast is **not** radioactive. In general, iodine compounds are used for CT scans and gadolinium compounds are used with MRI.

Breastfeeding recommendations for Radiocontrast

Parents and their healthcare providers may have concerns that radiocontrast given to the mother will enter her breastmilk. Furthermore, product information sometimes suggests that breastfeeding should be stopped for 24 hours after the procedure to prevent the breastfed baby from being exposed to radiocontrast. However, when measured, only a very small amount of both gadolinium and iodine based radiocontrast actually enter breastmilk and of this, very little would be absorbed into the baby's bloodstream. This tiny amount (less than 1 percent) is too low to have any effect on the baby. **Therefore, it is reasonable to continue breastfeeding without interruption. There is no need to express and discard the breastmilk.**^{1,2,3}

Gadolinium and NSF

Some specific gadolinium agents used in MRI are rarely associated with a condition called NSF (nephrogenic systemic fibrosis) which involves skin and internal organ complications in the patient.¹ The risk of this although rare, has been found to be increased in people who have abnormal kidney function. Some specific gadolinium agents are categorised as being at higher risk of being associated with this rare condition. If a breastfeeding mother has a history of abnormal kidney function, then she should discuss this with her radiology provider as lower risk gadolinium agents should specifically be used to reduce the risk to the mother herself.⁴ Even in patients with normal kidney function, lower-risk gadolinium contrast agents should be considered for general use due to risk of NSF.

There has never been a documented case of NSF in a baby whose mother was given gadolinium radiocontrast with a MRI. Therefore there is no need to express and discard breastmilk after the MRI.^{1,3,5}

Radioactive isotopes

Radioactive isotopes are used in nuclear medicine scans. Because these radioisotopes are radioactive, there are varying recommended waiting times specified after a scan before being able to recommence breastfeeding and be in close contact with young children.^{3,6} Women who are breastfeeding should discuss these recommendations with Nuclear Medicine staff or call MotherSafe.

References

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6. Hale TW. Hale's Medications and Mothers' Milk (internet). Radioisotopes in lactation. New York: Springer Publishing Company; 2021. Accessed December 2021



NSW Medications in Pregnancy & Breastfeeding Service

For more information call MotherSafe: NSW Medications in Pregnancy and Breastfeeding Service on 9382 6539 (Sydney Metropolitan Area) or 1800 647 848 (Non-Metropolitan Area) Monday -Friday 9am-5pm (excluding public holidays)