



PIC QUESTION OF THE WEEK: 01/10/05

Q: A 30-year old breastfeeding mother is scheduled to receive computerized tomographic (CT) imaging of the head enhanced by administration of Omnipaque 240®. How long must she wait before re-instituting breastfeeding?

A: Iohexol (Omnipaque ®) is a nonionic, low- osmolality, iodinated radiographic contrast medium (RCM) used extensively in various concentrations for coronary arteriography, myelography, CT scanning, etc. Intravenous RCM have a relatively short half- life (~2hours), limited penetration into breast milk (<1% of administered maternal dose), and low oral bioavailability (<1%). It is estimated that <0.01% of the dose given to the mother is absorbed by the breastfeeding infant. This is actually <1% of the dose usually given to an infant undergoing a radiographic procedure. Because of the small amount of contrast medium found in breast milk and its limited absorption, the American College of Radiology states, “Available data suggest that it is safe for the mother and infant to continue breastfeeding after receiving such an agent. If the mother remains concerned, she may abstain from breastfeeding for 24 hours with active expression and discarding of milk from both breasts during that period.” In addition, the American Academy of Pediatrics considers iohexol compatible with breastfeeding. Thus, this mother might elect to just continue her normal schedule of breastfeeding or interrupt it for 12-24 hours after administration of RCM. Similar recommendations have now been made for gadopentetate (Magnevist®), a gadolinium complex used to provide positive contrast enhancement for magnetic resonance imaging (MRI).

References:

- American College of Radiology. Manual on contrast media- 4.1 edition; reprinted 2003, 50-1.
- Committee on Drugs, American Academy of Pediatrics. The transfer of drugs and other chemicals into human milk. Pediatrics 2001;108:776-89.
- Hale TW. Medications and mothers' milk. 11th ed. Amarillo: Pharmasoft; 2004.

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