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## Information for Breastfeeding Patients

### Use of gadolinium-based contrast during your MRI examination

When injected into the body, MRI contrast agents (usually gadolinium based) improve diagnostic accuracy in MRI by helping the radiologist to see certain tissues, abnormalities or disease processes more clearly. MRI contrast medium is given by intravenous injection, that is, through a small needle into a vein in your arm, either by hand injection or by an automated injector.

Sometimes, based on the notes provided by your doctor on your referral, it will not be expected that you require gadolinium but after some of the scanning is done, the radiologist may decide that gadolinium would help to make the images clearer. If you are told part of the way through your scan that gadolinium will be needed, you should not worry that this is an indication that something serious is wrong. Most often this is just being done to make the images clearer and therefore easier to interpret so that the diagnosis is more definite.

"Minute levels of gadolinium contrast medium are identified in breast milk following intravenous administration (Less than 0.04% of the intravascular dose given to the mother is excreted into the breast milk in the first 24 hours [ACR, 2010]). These levels are less than 1% of the recommended intravenous paediatric dose. However, the taste of the milk may be altered in the presence of gadolinium (Webb et al., 2005). Cessation of breast-feeding for 24-48 hours is considered to be of uncertain and probably minimal value and breast milk need not be discarded after gadolinium contrast administration (Webb et al., 2005; RANZCR, 2007)."

- *If the supervising radiologist decides the administration of gadolinium contrast media is required for diagnosis the issues above will have been discussed with you to allow an informed choice to be made and documented.*

Review of the available literature shows no evidence to suggest that oral ingestion by an infant of the tiny amount of gadolinium contrast medium excreted into breast milk would cause toxic effects and would suggest that it is safe to continue breast-feeding.

If you remain concerned about any potential ill effects, you can make an informed decision as to whether to continue or temporarily abstain from breast-feeding after receiving a gadolinium contrast medium. The recommendation would then be to abstain from breast-feeding for 24 hours with active expression and discarding of breast milk from both breasts during that period. In anticipation of this, you may wish to use a breast pump to obtain milk before the contrast study or switch to formula milk to feed the infant during the 24-hour period following the examination.

#### References:

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