

Kidney Disease & MRI Contrast

During an Magnetic Resonance Imaging (MRI), an IV contrast (dye) is given. This is done to obtain more detailed images of the inside of the body. This dye contains gadolinium. In 2006, gadolinium-contrast agents were linked to the development of Nephrogenic Systemic Fibrosis (NSF) in some people with **severe** kidney disease.

Certain safeguards have been put into place to protect patients with kidney disease.

NSF is a **rare** skin disorder but may affect you if you have kidney disease. Symptoms include:

- Gradual thickening the skin.
- Redness, itching, and a burning sensation of the skin.
- Stiffness or decreased joint movement.
- Joint swelling (mostly of the lower legs).

NSF can affect other organs and in rare cases it may cause death.

There is no known cure for NSF. But if kidney function improves, it may slow, stop, or even reverse the signs NSF.

NSF seems to be linked to:

- High doses of contrast.
- The use of a certain type of gadolinium called gadodiamide (Omniscan™). This is not used at Northwestern Memorial Hospital (NMH).

Since only a few hundred cases of gadolinium–related NSF have been reported in the world, it appears that the risk to kidney disease patients is relatively low. But, the true risk is not known. The Food and Drug Administration (FDA) cautions that all gadolinium-based MR contrast agents may pose at least some risk of NSF.

NMH has put certain safeguards into place to protect patients with kidney disease.

- A gadolinium-based MR contrast agent called MultiHance™ (which has a lower reported NSF risk) is used.
- The lowest possible dose of contrast will be given for your MRI study.
- If you are on dialysis, we urge you to have a dialysis treatment right after your MRI and again the next day. This helps rid your body of the contrast dye used during the MRI exam.

We will be glad to answer any questions you may have about the MRI and MRI contrast agents.

Health Information Resources

For more information, visit one of Northwestern Memorial Hospital's Health Learning Centers. These state-of-the-art health libraries are located on the third floor of the Galter Pavilion and on the first floor of the Prentice Women's Hospital. Health information professionals are available to help you find the information you need and provide you with personalized support at no charge. You may contact the Health Learning Centers by calling 312-926-LINK (5465) or by sending an e-mail to hlc@nmh.org.

For additional information about Northwestern Memorial Hospital, please visit our Web site at www.nmh.org.

Para asistencia en español, por favor llamar a el departamento de representantes para pacientes al 312-926-3112.

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Developed by: MRI Department

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1100-07
900855 (02/08)