

MRI Intravenous Contrast

Your health care provider has requested an MRI scan with the injection of a gadolinium based contrast agent (GBCA) into the body. The contrast will be given through a small needle placed into a vein. The contrast improves the diagnostic accuracy of the MRI scan and can provide crucial, life-saving medical information compared to an exam without using a GBCA. Unlike contrast agents used in X-rays or CT scans, MRI contrast agents do not contain iodine and rarely cause allergic reactions or other problems. Hundreds of millions of doses of GBCA have been given to patients throughout the world since these agents were first developed and approved for use in 1988.

The following complications are possible anytime an injection is given: minor pain, bruising, swelling or infection. In rare cases (0.07% to 2.4%), contrast agents can cause adverse reactions.

The most common reactions are mild. Examples include headache, dizziness, nausea and itching. More serious reactions include trouble breathing and swelling of the lips, occurring in less than 0.01% of cases. Allergic reactions will tend to occur right away. Serious reactions may require emergency treatment including medication. Fatal reactions to gadolinium can occur but are extremely rare.

With normal kidney function, most of the gadolinium is removed from your body in the urine within 24 hours.

A small amount of the gadolinium can stay in the body. Currently all studies have found no harmful health effects from this retention. There are different types/brands of GBCA that can be used for your MRI exam. The amount of gadolinium that stays in the human body differs among the available types/brands. The type of contrast used is based on the specific exam being performed.

If you have acute renal failure or severe chronic kidney disease and receive a gadolinium-based contrast agent, there may be a very small risk of developing a rare condition. This is called Nephrogenic Systemic Fibrosis (NSF). NSF is reported almost exclusively in patients who have severe renal insufficiency and are exposed to a GBCA.

If you are pregnant or think you may be pregnant, please inform the technologist.

If you are breast feeding, it is safe to continue breast feeding after the contrast has been given.

Visit our website for more information about support groups, clinical trials and lifestyle information.

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NOTE: This information is provided to you as an educational service of National Jewish Health. It is not meant to be a substitute for consulting with your own physician.

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