

MRI: Gadolinium-based Contrast Media



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This leaflet contains information on gadolinium-based contrast media (also known by several brand names: Dotarem®, Gadovist®, Primovist® and ProHance®). Contrast media is a special dye used during Magnetic Resonance Imaging (MRI) scans. If you have any questions or concerns, please speak to a healthcare practitioner caring for you.

What is gadolinium?

Gadolinium-based contrast media is a clear, colourless fluid that has magnetic properties. It is used in combination with MRI to allow blood vessels, organs and other non-bony tissues to be seen more clearly during an MRI scan and to help with diagnosis. The radiologist (a specialist doctor trained in studying scans and X-rays) will decide if gadolinium is appropriate for you.

How is it given?

Gadolinium is injected into one of your veins via a cannula during your scan. The cannula is inserted through your skin into a vein using a needle. Once the cannula is in place the needle is removed, leaving the small, thin plastic tube in the blood vessel. This should be comfortable and will only be in place until your scan is finished.

Are there any side effects?

Gadolinium is generally very safe, however it is not suitable for everybody.

Warnings and Precautions: Please make us aware if any of the following apply to you.

- you have had a previous reaction to a contrast injection
- you have asthma
- you have a history of severe/multiple allergies or hayfever that has required medical intervention
- your kidneys do not work properly
- you have recently had, or soon expect to have, a liver transplant
- you have disease affecting your heart or blood vessels and are being treated with a beta-blocker (medicine for heart and blood pressure disorders, such as metoprolol)
- you have had convulsions or you are being treated for epilepsy
- you have hypokalemia

The radiologist will assess the benefit-to-risk ratio and decide if a contrast injection is appropriate for you.

In patients with normal kidney function, most gadolinium (over 90%) is excreted in the urine within 24 hours. In people who have severely reduced kidney function or hepato-renal syndrome (a condition involving reduced function of the liver and kidneys) gadolinium should only be used with radiologist approval.

There is a small risk that you may have an allergic reaction to Gadolinium.

Mild side effects, such as nausea and headache are uncommon, affecting up to 1 in 100 patients, these effects pass off quickly. More severe allergic reactions, such as vomiting or an itchy rash are rare (affecting up to 1 in 1000 patients), Serious allergic reactions are very rare affecting up to 1 in 10,000 patients.

Please seek immediate medical attention if you have any of the following:

- swelling of the face, mouth, hands, feet or throat
- difficulty in breathing or swallowing
- fainting
- coughing/wheezing/sneezing
- eye irritation
- rash/hives/itching.

Known adverse effects: Nephrogenic systemic fibrosis is a rare condition associated with gadolinium contrast media given to patients with severe renal disease. Since radiology facilities routinely screen patients for kidney disease, and withhold gadolinium from those with severe renal disease NSF is very rare, effecting fewer than 1 in 10,000 patients.

If you have any concerns about side effects, please speak to the staff caring for you.

Extravasation: During the procedure contrast media (15-30mls) may leak out from the vein to the surrounding tissues – this is known as extravasation. You may experience a stinging sensation, or pain at the injection site which usually resolves with conservative treatment. Extravasation may commonly affect between 1 in 1000 to less than 1 in 10 cannulated patients (0.1%-6% of all patients).

Contact us

If you have any questions or concerns, or if you experience any of the symptoms listed above, please contact the **CT/MRI Department** on **01493 453260** (Monday to Friday, 9am to 5pm). Out of hours, please also contact your GP or go to your local Emergency Department (A&E) for advice. Further information about gadolinium is also available in the manufacturer's patient information leaflet, please ask us if you would like a copy.

Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call the James Paget University Hospital pharmacy on **01493 452387**.

Opening hours: Monday to Thursday-9am to 5pm, Friday-9.30am to 5pm, Weekend/Bank Holiday-9am to 5pm (closed 12:30-1:30pm).

Feedback

We want your visit to be as comfortable as possible. Please talk to the person in charge if you have any concerns. If the ward/department staff are unable to resolve your concern, please ask for our Patient Advice and Liaison (PALS) information. Please be assured that raising a concern will not impact on your care. **Before you leave the hospital you will be asked to complete a Friends and Family Test feedback card.** Providing your feedback is vital in helping to transform NHS services and to support patient choice.

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BEHAVIOURS:

- Courtesy and respect
- Attentively kind and helpful
- Responsive communication
- Effective and professional

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IN TRAN
communication for all

The hospital can arrange for an interpreter or person to sign to assist you in communicating effectively with staff during your stay. Please let us know.

For a large print version of this leaflet, contact
PALS 01493 453240