

# Paediatric MAG-3 Renal scan

Nuclear Imaging Department – Radiology

The prevention of infection is a major priority in all healthcare and everyone has a part to play.

- Please decontaminate your hands frequently for 20 seconds using soap and water or alcohol gel if available
- If you have symptoms of diarrhoea and/or vomiting, cough or other respiratory symptoms, a temperature or any loss of taste or smell please do not visit the hospital or any other care facility and seek advice from 111
- Keep the environment clean and tidy
- Let's work together to keep infections out of our hospitals and care homes.



# Introduction

This leaflet tells you about your child having a MAG-3 Renal scan. It explains what is involved and what the possible risks are. It is not meant to replace an informed discussion between you and your doctor.

## What is Nuclear Imaging?

Nuclear Imaging is a way of imaging different parts of the body using a small amount of radioactive isotope, attached to different chemicals. These radioactive isotopes give off gamma rays which are similar to X-rays.

A gamma camera is used to detect the rays and produce an image on the computer. Unlike ordinary X-rays nuclear imaging can be used to show how well an organ is working as well as what it looks like.

The radioactive isotope is normally given as an injection into a vein but can be inhaled or swallowed depending upon the test.

## What is an MAG-3 Renal scan?

A MAG-3 renal scan is used to assess the drainage and function of your child's kidneys.

The radioactive isotope used in this test has to be given as an injection into your child's arm or hand. The scan will also involve the administration of a drug called a diuretic at the same time as the radioactive isotope which will be given through the same needle. A diuretic causes the body to produce a greater volume of urine.

The insertion of the needle will be performed by qualified paediatric specialist nurse or doctors.

After the injection images lasting 20 minutes will be acquired.

## Is there any preparation?

It is important that your child is well hydrated on the morning of their scan so please give them plenty to drink (water, milk or squash are fine).

Your child may eat or take any medication as normal on the morning of the scan.

## Can I bring a relative / friend?

Yes, although if possible we prefer it if you don't bring any other children with you.

Children under 16 years attending for a scan should be accompanied by a parent or guardian.

## What happens during the scan?

Your child will not have to undress for the scan.

The scan is taken with your child lying on an examination couch above the gamma camera. Babies will be placed in a special cushioned support.

Following the injection we will need your child to lie as still as practically possible, there will be distraction toys, music and a TV in the room during the scan. If you wish to bring a favoured DVD or CD for your child to watch or listen to that will be fine.

The scan itself will last 20 minutes during which time we will see the radioactive isotope being absorbed into the kidney and then drained into the bladder.

When the first image is done we will ask older children to go to a specific toilet and empty their bladder, after which a final 1 minute picture is taken. Babies and toddlers will not require the final image.

## How long will it take?

You will be in the department approximately 45 minutes to an hour.

## What are the risks?

Most things that we do in life or in medicine have a small risk and we want you to understand any risks involved. Please remember that we would not recommend this test if we did not think that the risks were outweighed by the potential benefits.

The amount of radiation your child will receive is very small and does not stay in the body for very long. However, as gamma rays are similar to X-rays, there will be a small risk from being exposed to radiation. This is the same as the natural radiation we all receive from the environment over a period of approximately six months.

## Radiation

The amount of radiation your child will receive is very small and does not stay in the body for very long. However, as gamma rays are similar to X-rays, there will be a small risk from being exposed to radiation. This is the same as the natural radiation we all receive from the environment over a period of approximately six months.

## Are there any side effects?

The radioactive isotope will not cause your child any side effects.

The effects of the diuretic will last for about 2 hours. This will mean that your child may feel the need to go to the toilet more often than normal and it will also make them thirstier. It is important that you encourage them to drink more than normal following the scan to stop them becoming dehydrated.

## When do we get the results?

We cannot give you the results of the scan on the day you attend. The scan will be reviewed and a written report sent to the consultant who referred your child.

Your consultant will then arrange a follow up appointment to discuss the results of your child's scan.

What should I do if I have a query about my child's appointment?

If you have any queries about your scan or wish to alter the appointment please contact the department on:

01902 307999 ext. 86347

Monday – Friday between 9:00am and 4:00pm

If you need an interpreter, please let us know and we will arrange one for you.

## Where can I get further information?

### **Websites:**

For general information about radionuclide tests, visit The British Nuclear Medicine Society website: [www.bnms.org.uk](http://www.bnms.org.uk)

If you wish to know more about the radiation used in medical examinations, information can be found on the Public Health England website: [www.gov.uk/government/organisations/public-health-england](http://www.gov.uk/government/organisations/public-health-england)

## Radiology Department

The Nuclear Imaging department is on the 2nd floor of the Radiology Department - Zone A2.

The Radiology Department is situated off the main hospital street close to Greggs.

A site map can be found on the reverse of your appointment letter.

# Transport Information

## **Zone A: A2 Radiology Department**

**The nearest car parks are:** P5 & P6. Please allow time to park as our car parking areas may be busy. Car Parking is “pay as you leave”. There are designated spaces for disabled.

## **Public transport:**

Details of the buses serving to the hospital are on our website:

[www.royalwolverhamptonhospitals.nhs.uk](http://www.royalwolverhamptonhospitals.nhs.uk)

Alternatively you can visit [www.nxbus.co.uk](http://www.nxbus.co.uk) to plan your journey or ring them on 0121 254 7272

## English

If you need information in another way like easy read or a different language please let us know.

If you need an interpreter or assistance please let us know.

## Lithuanian

Jeigu norėtumėte, kad informacija jums būtų pateikta kitu būdu, pavyzdžiui, supaprastinta forma ar kita kalba, prašome mums apie tai pranešti.

Jeigu jums reikia vertėjo ar kitos pagalbos, prašome mums apie tai pranešti.

## Polish

Jeżeli chcieliby Państwo otrzymać te informacje w innej postaci, na przykład w wersji łatwej do czytania lub w innym języku, prosimy powiedzieć nam o tym.

Prosimy poinformować nas również, jeżeli potrzebowaliby Państwo usługi tłumaczenia ustnego lub innej pomocy.

## Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਰੂਪ ਵਿਚ, ਜਿਵੇਂ ਪੜ੍ਹਨ ਵਿਚ ਆਸਾਨ ਰੂਪ ਜਾਂ ਕਿਸੇ ਦੂਜੀ ਭਾਸ਼ਾ ਵਿਚ, ਚਾਹੀਦੀ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

ਜੇ ਤੁਹਾਨੂੰ ਦੁਭਾਸ਼ੀਏ ਦੀ ਜਾਂ ਸਹਾਇਤਾ ਦੀ ਲੋੜ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

## Romanian

Dacă aveți nevoie de informații în alt format, ca de exemplu caractere ușor de citit sau altă limbă, vă rugăm să ne informați.

Dacă aveți nevoie de un interpret sau de asistență, vă rugăm să ne informați.

## Traditional Chinese

如果您需要以其他方式了解信息，如易读或其他语种，请告诉我们。

如果您需要口译人员或帮助，请告诉我们。