

INFOSHEET



This information sheet is for educational purposes only.

For further information regarding this topic, please the Nuclear Medicine team at your treating hospital.

Nuclear Medicine MAG3 Renal Scan

What is a MAG3 Renal Scan?

A MAG3 scan is a test used to assess the function of the kidneys.

Why do you need a Nuclear Medicine MAG3 scan?

A MAG3 scan is needed to help:

- determine relative renal function
- assess blockages within the renal system
- detect and assess hydronephrosis
- assess success of renal transplant

How can I prepare my child for a MAG3 scan?

There is no special preparation for a MAG3 Renal scan.

Prior to the test, it is helpful if you:

- Explain to your child why the test is needed and reassure them that you'll be with them every step of the procedure.
- Bring along their favorite toy, movie or object that provides them comfort (blanket, teddy, dummy etc.).
- If you would like numbing cream put on your child before the cannula is inserted, please arrive 30 minutes prior to your scheduled appointment. Please discuss this with us prior to your appointment.

What happens during a MAG3 scan?

On arrival your child will have a cannula (a small plastic tube that goes into a vein) inserted.

Then we will run some fluids through it for 20 minutes to ensure that your child is very well hydrated before we start the scan.



In some cases, it may also be necessary for our Nuclear Medicine Physician to insert a bladder catheter, to ensure that the bladder stays empty during the entire procedure; this will be discussed with you and your referring doctor prior to the test.

In our scanning room, your child will lay on our scanning bed and possibly be wrapped in a blanket with Velcro seatbelts to help them keep still as movement can ruin the images.

Your child will be given an injection, through the cannula, of a special substance called a radiotracer. This injection gives off a small amount of radiation that can be detected by our special cameras.

We only inject a small amount of this radiotracer; the dose we give is based on your child's weight.

The injection is given while your child is laying on the scanning bed so that we can make an image of the radiotracer's journey from the blood stream to the kidneys.

The kidneys will take it up, process it and turn it into urine. Then we observe whether the urine goes down to the bladder or if it stays in the kidneys. This first lot of scanning takes around 20 minutes.

If it is necessary, we may give a medicine called Lasix through the cannula and do another scan for another 20 minutes. Lasix is a special medicine that makes the kidneys produce more urine than they usually do.

At the end of the scan, we need to take one last picture after your child empties their bladder.

It will take around two and a half hours, from your arrival, for this test to be completed.

You will be able to stay with your child throughout the imaging procedure. Your child will be able to watch TV shows, a movie or listen to music while the images are taken.

Will my child feel anything during the MAG3 scan?

Your child may experience some discomfort when the small intravenous cannula is inserted. We can minimize this with the application of numbing cream thirty minutes prior to your appointment.

If Child Life Therapy services are available, they may be able to help distract your child whilst they have their injection.

During the scans, your child will not feel anything. The camera does come quite close but will not touch your child at all.

Is the MAG3 scan safe?

During this procedure your child will be exposed to a small amount of radiation.

The benefits of finding an injury or disease are generally much more important than the potential risk from receiving a small dose of radiation.

Allergic reactions are very rare and almost always mild. Your treating doctor should discuss these with you prior to your scan.

What happens after the scan?

Once the images have been taken and checked by one of our Doctors or Nuclear Medicine Scientists, you are free to go.

How do I receive the results of the scan?

Your results will not be given to you directly after the test.

The results take a bit of time for our Nuclear Medicine Scientists to analyze and for our Nuclear Medicine Physicians to report their findings.

Your referring doctor will usually receive the report the next business day. You need to ensure you have a follow up appointment with them to get the results and find out what needs to happen next.

Contact us

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