



Royal Berkshire
NHS Foundation Trust

DMSA scan

Information for parents

The aim of this leaflet is to answer some of the questions that you or your child may have about their DMSA scan. You will have an opportunity to discuss any further questions on the day of the scan.

What is a DMSA scan?

DMSA stands for Dimercaptosuccinic Acid. A DMSA scan uses radioactive chemicals to create special pictures of the kidneys which show how well they are working, and if they are damaged or scarred.

Why does my child require a DMSA scan?

This scan is commonly used for children who have had urinary tract infections. It allows the doctors to compare the function of each kidney. Ultrasound scans can show the size and shape of kidneys but cannot show how they are working. The test is performed four to six months after a urinary tract infection to identify if any scarring has occurred as a result.

What is the procedure for the day?

You will be given an appointment for your child to attend Kempton Day Bed Unit at around 9am. Firstly we will weigh your child to determine the amount of radioactive tracer that is suitable for their size. We will also apply a local anaesthetic “magic” cream to help numb the child’s skin before we give them a small injection. This is usually on the back of their hand. We have play staff that can help distract your child during this procedure and they can sit on your lap if they like. Your child will then have a plaster over the injection site.

The DMSA substance will take 3-4 hours to travel to the kidneys, during which time you and your child are free to leave the hospital. Your child may eat and drink as normal and they will not feel any different. You will be asked to return to the medical physics department around 2pm for the scan.

What happens during the scan?

The scan takes around 30 minutes using a gamma camera. During this time your child will need to sit or lie as still as possible. It might be helpful to bring your child's favourite toy or book to help keep them occupied during the scan. Smaller children will be lying on the camera surface on their back with nothing placed over them. Older children will either sit in front or lie beneath a camera. It also takes place in a darkened room. It may be helpful to explain this to older children beforehand. Parents can stay with their child throughout the scan.

What shall I bring to hospital?

- -You will need to bring any nappies, food, drinks that your child may require during their time in hospital.
- A favourite toy or book would help during the scan.
- As we weigh your child we can also write this in your child's red book for you.
- We can give you a car parking permit to allow you free parking in the multi-storey car park for the duration of the day.

What happens after the scan?

Once the scan has finished the medical physics staff will advise when you can take your child home. You will not be given any results on the day of the scan. The result will be sent to your child's consultant for them to explain to you in a clinic appointment.

A very small amount of radioactive chemicals will be released in the child's urine. For babies in nappies this is not harmful to their skin or to those changing their nappies.

Are there any side effects or complications of a DMSA scan?

Although the word 'radioactivity' sounds alarming the amount of tracer used is kept to a minimum to achieve a high quality scan. The dose of radiation is very small and in many cases is not much different to a series of normal x-rays. These are general guidelines and each child will be assessed individually so each case may vary slightly.

Further information

For further information feel free to call:

- Kempton Day Bed Unit: 0118 322 7512 (Mon-Fri 7am-7pm)
- Medical Physics Department: 0118 322 7355

Visit the Trust website at www.royalberkshire.nhs.uk

This document can be made available in other languages and formats upon request.

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