

DMSA Scan

What is a DMSA Scan?

A DMSA scan is an imaging study that looks at your child's kidneys. It is performed in the Nuclear Medicine department and uses a special kind of camera called a gamma camera. This camera **does not** give off radiation. We do this study by using a medicine called a tracer. This medicine contains a small amount of radioactive material. It travels through your child's bloodstream to the area we need to see so the gamma camera can take pictures.

These tracer medicines (called radiopharmaceuticals) are carefully tested. Side effects are rare and give low radiation exposure. Radiation exposure from Nuclear Medicine procedures is minimized by strictly adhering to ALARA (As Low as Reasonably Achievable).

<http://snmmi.files.cms-plus.com/Patients/Nuclear%20Medicine%20and%20Radiation%20Safety%20Factsheet.pdf>

Why is this exam performed?

A DMSA scan looks at the size, shape, and position of the kidneys. It is also used to see any scarring in the kidneys caused by frequent infections.

What to expect

If your child does not require medication to sleep (sedation) for the exam, one parent or guardian may be with your child in the exam room. It may be helpful to make arrangements for other siblings. For safety reasons, you will not be permitted to accompany your child if you are pregnant.

Preparing your child is key to the success of this study. To help prepare your child, our Child Life Specialists will help ease your child's fear and anxiety. Please let a staff member know if you are interested in a Child Life consultation at no additional cost.

For those children requiring sedation for the test, you will be able to stay with your child until he or she is off to sleep.

Any child receiving sedation for the exam can:

- Eat food up to 8 hours before your arrival time.
- Drink milk, formula, and food thickener up to 6 hours before your arrival time.
- Breastfeed or given breast milk up to 4 hours prior to your arrival time.
- Only drink clear liquids up to 1 hour before your arrival time (water, Pedialyte, Sprite, 7-up, or apple juice). Orange juice is not a clear liquid.
- Take prescribed medications with a small sip of water (if needed) prior to arrival time unless otherwise specified.
- **If these instructions are not followed, the exam may be rescheduled or cancelled due to the risk posed to your child.**

You will meet with a Nurse Practitioner and/or the doctor who will be providing the sedation medication. You can ask questions, discuss risks, and be asked to sign your consent.

Your child and the accompanying adult will be taken to the procedure room by a technologist and asked to change into a gown. The technologist will ask why the study is being done and explain it to your child.

For this 30 minute exam:

- If sedated, your child will get an intravenous line, also known as an IV, to give the medications. An IV is a tiny tube that is used to give the body medicine. Your child might feel a pinch or a poke when it goes in the vein, however, we have ways to manage the pain.
- To help make sure your child is safe and can hold still for the test, we use seatbelts. Seatbelts can be Velcro straps, swaddle blankets, or tape straps. Seatbelts They can be quickly removed in the event of an emergency.

- The Nuclear Medicine technologist will inject the tracer into the IV line.
- You and your child will then take a 2 to 4 hour break. You may leave the Nuclear Medicine department if you wish. The technologist will tell you what time to return and what food/drinks your child can have.
- When you return, your child will be placed on the exam table under the gamma camera. The table will move slowly under the camera during the exam. The camera will be close, but it will not touch your child.
- The pictures will take about 30 minutes. Your child will need to hold still for this entire time.
- We have television in the exam rooms which can be used if your child is awake. You can also bring a tablet with your child's favorite movies.
- You will be provided discharge instructions at the conclusion of your appointment.

If your child received sedation

Your child may be sleepy and unsteady from the sedation for several hours. Your child may have a red face or be slightly swollen around the face and eyes. This should improve within 24 hours. Your child may wake up feeling hungry. When he or she is wide awake, the recovery nurse will give clear liquids such as Pedialyte, apple juice, Sprite or water. If your child does not throw up during the next 30 minutes, he or she can eat normally.

To prevent accidents, closely monitor him or her for the next 24-48 hours. Walk with your child, holding hands even if he or she seems to walk without trouble. It is also important to help your child in the bathroom.

The sedative and the test may disrupt your child's routine. You may notice a change in behavior for the rest of the day. Some children may become cranky; some sleep for hours. Others need to stay up late because they slept for the test. Be patient. Things will be back to normal the next day.

When to seek help

Call 911 if your child has difficulty breathing and looks very pale or has blue lips or nails or a very high fever (greater than 103°F).

Call your child's doctor if your child has any of the following:

- Red blood in the urine, pain
- Throws up more than three times
- Seems confused or dizzy the next day, is harder to wake up than usual
- Has a sore throat that gets worse or does not go away in two days
- Has a fever of over 101°F for more than 24 hours
- Develops any allergies such as hives, itching or a rash

Receiving your DMSA Scan results

Call your doctor for a follow up appointment as instructed. You can also call the doctor who ordered the study for the results 24 to 48 hours after the test. If you have any additional questions or concerns, please don't hesitate to call Radiology Nursing at 832-826-5371.

If you would like a CD of your child's study, please call the film library at 832-822-1202. The Radiologist's report will also be included on the CD.