

Pediatric DMSA Scan

About DMSA Scans

DMSA is short for “dimercapto succinic acid.” It is a special nuclear medicine that works through the kidneys. This small amount of medicine checks how your child’s kidneys are working, their shape, size and location, and if there is any damage or scarring from infections.

Reasons for a DMSA Scan

DMSA scans are needed if your child has one of these problems:

- Kidney infections
- Kidney function issues or concerns
- Kidney is not in the normal place in the body (ectopic kidney)
- Loss of blood flow and oxygen supply to tissue or organs
- High blood pressure
- Horseshoe kidney
- Acute renal failure
- Multicystic dysplastic kidney
- Kidney trauma

Sedation

Talk with your doctor if you think your child will need sedation for this test. If your child needs to be sedated, staff will call you the day before. They will tell you what time your child needs to stop eating and drinking the night before.

Day of the Test

Your child will go to AFCH Imaging to check in. Staff from Nuclear Medicine will meet with you to explain the test.

An IV line will be started for the special DMSA medicine and possible fluids. If your child does not need sedation, the IV will then be removed. A Child Life Specialist will be there to help you and your child through this part of the test.

There is a wait of 1 ½ - 3 hours for the medicine to go through the blood stream and get to the kidneys. If your child will be sedated for the scan, the nurses will talk you through the steps. If your child will not be sedated, your child may eat, drink or go for a walk. You will check back in at AFCH Imaging upon your return. Staff will pick you up and take you to Nuclear Medicine where the pictures will be taken.

Your child needs to lie flat on an exam table for 1 ½ - 2 ½ hours while a special camera takes pictures of the kidneys. If your child is less than 12 years old, the scan will take closer to the 2 ½ hours. It is very important to lie very still during this test. One or two parent/ caregivers may stay during the scan. It may be helpful to bring books, a movie or a bottle, to help your child lie still. If your child is unable to lie still, they may need sedation.

If your child was sedated the nurse will take you to recovery. After your child is stable, you can leave the clinic or go to your follow up appointment where your doctor will discuss the results of the test.

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person’s health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 7/2023 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#7185