

Mission Bay - Radiology Department

Tips For Preparing Your Child For Mri

A Scan Without Anesthesia Program

What is an MRI?

MRI stands for Magnetic Resonance Imaging. Images, or pictures, are created by using a magnetic field and radio waves. The camera is a large circle with a tunnel in the middle. During the study, or scan, your child will lie down on a bed in front of the camera. The bed will move into the center of the tunnel to take pictures. MRI does produce loud noises but earplugs are provided along with other tools to help your child complete this study. Typically, these studies range from 45-60 minutes. Some are longer and some are shorter.

Describing an MRI

One way to describe an MRI to children is by saying, "It is a large circle camera with a tunnel going through the middle. There is a bed in front of the camera that goes in and out of the tunnel when taking pictures. Some kids say it looks like a big donut or a space ship. The camera is noisy and makes several loud noises while it takes pictures. These noises are normal and nothing will touch your body while you are in the tunnel." See pictures in the MRI prep book for kids.

Listen to MRI sounds

The MRI camera makes very loud noises while taking pictures. MRI noises can sound like a combination of knocking, banging, honking, and drumming. The MRI camera makes about four different main noises. These noises happen for approximately 3-5 minutes at a time while the camera is taking the pictures and then there is a pause between the next set of noises/pictures. Some kids say it sounds like robots, machines, construction zones, or different songs. Encourage your child to tell you what the noises sound like to them. Listening to the noises in advance can allow kids to become more familiar with these noises and better able to tolerate them during their scan. Listening in advance can also reduce startling during the study and allow children to be less scared of the noises. It can be helpful to tell children these noises happen when the pictures are being taken, so the noises are a reminder to keep their bodies still.

Two resources for listening to MRI noises:

1. **The SimplySayin App** (free to download). Click the 'Preps' tab and then scroll to MRI. Listen to the four different noises.
2. **YouTube Noises:** <https://www.youtube.com/watch?v=6Aj2QspPf7s>
This particular video has the noises go on for a while so it might be worth listening for a few seconds and then skipping ahead to the next one.

Listen to MRI sounds

Practice lying still in the week before your appointment. Try to find a quiet space for your child to practice lying still. Try a short amount of time to start and provide praise for their success. Then increase the amount of time the next time they practice. Some kids also find it helpful to practice in a smaller space or tube, similar to the MRI camera. Under a coffee table or in a play tunnel are some examples of spaces that might work but make sure their body does not touch the top. While they practice in these small spaces, point out and remind them that nothing is touching their body even though it is a small space. After the first few times, add in the MRI noises/sounds so they can get a sense of the experience all together. Remember, that most kids will also get to watch a movie or listen to music during their MRI which helps the time go by faster than in these practice sessions.

Rehearse coping techniques

Your child's biggest job during the MRI is to keep their body still. Help your child think about what things might help them during the pictures. Would they prefer a movie or music? Do they want to hold a caregiver's hand? Or have a caregiver stand or sit next to the bed the whole time? Many kids benefit from knowing that a caregiver can be with them and that they will not be alone. Other kids like to bring a special stuffed animal from home or a favorite blanket. Make sure comfort items do not have metal or too many sparkles as these can interfere with the pictures; the MRI technologist will test these items for metal prior to the scan. Other kids find it helpful to go for a walk or do something physical before their MRI earlier in the day to help get their wiggles out. If they have a favorite DVD or music CD from home you can bring that too; just make sure it is not blue-ray. We also have a wide range of movies and music to choose from too. For some kids, it might also be helpful to focus on what else will happen in the day and that the MRI is just one piece of their day. For example, it might be helpful to talk about a positive thing that might happen after the pictures like going to the park, or spending some extra time together, getting a special meal after to celebrate their success, or something that they really enjoy.

A caregiver or child will also be given a squeeze/emergency ball in case they need to talk to the MRI technologist. The technologists will also be checking-in throughout the study which can be reassuring and may be worth mentioning to children when you prepare them in advance. Kids may also hear the technologist remind them to stay still or say, "try to be as still as statue" throughout the study. Still as Statue or freeze tag can also be a fun game to play at home leading up to the MRI as it helps kids focus on being still for periods of time in a playful way.

When to start preparing your child and why the study is needed

- Preparing children 5 years and older several days in advance is helpful.
- For kids 3-5 years of age, one to two days in advance is typically a good amount of time for preparation.
- Also, helping kids understand 'why' they need pictures is important. Simple explanations often work well.
 - For example, telling a younger child that the doctor needs the pictures to learn more about their body or to learn more about a specific body part like the head/leg/stomach (depending on what body part is being scanned).
- For older kids, more details can be given.
 - For example, the doctor would like to take more pictures of your brain to understand why you are having so many headaches.

Things to know prior to coming to the hospital

- A light snack or meal is helpful prior to the MRI. This can help kids focus on their job of being still and they are less likely to wiggle.
- Avoid drinking too many liquids, children will be asked to use the bathroom prior to their MRI but it can be hard to stay still if a child needs to use the restroom during the MRI scan.
- One caregiver can and is encouraged to stay in the room with their child during the MRI. If you stay in the room it is important that you remove all metal from your pockets and body. **If you are pregnant, we are unable to have you in the MRI room. Siblings are also not allowed to be in the MRI room or unaccompanied in the waiting areas.**
- Additional pictures and information can be found in the MRI kids preparation booklet shared with you.

How to contact your Child Life Specialist

Please email **SWAP@ucsf.edu** or call our Radiology Child Life Specialists Mikaela Smith or Albery Chan at **(415) 502-5037**

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