Fetal MRI: What You Need to Know

What is Fetal MRI?
Fetal MRI (magnetic resonance imaging) is like a special camera. It takes pictures of babies inside their mom’s belly. These pictures help doctors see the baby closely before the baby is born. MRI is safe for both the mom and the baby.

Why Would Someone Need a Fetal MRI?
Fetal MRI will be indicated when the doctor needs a better look at the baby after doing an ultrasound. This can be because the ultrasound could not see well a portion of the baby or when an abnormality is suspected. Fetal MRI is performed in the second or third trimester. Fetal MRI may be used in the first trimester of pregnancy in case of a medical emergency.

Fetal MRI helps doctors
- to better see the baby
- confirm or exclude a potential abnormality detected by ultrasound
- provide information for diagnosis, therapy, and delivery planning
- follow up or guide genetic testing when there is an increased risk for a syndrome

Your doctor may use fetal MRI to confirm or provide additional information for a diagnosis, including (but not limited to):

- Spina bifida
- Brain abnormalities
- Neck masses
- Congenital pulmonary airway malformations (CPAM) or other lung lesions
- Congenital Diaphragmatic Hernia
- Abdominal wall defect such as Omphalocele
- Genito-urinary abnormalities (kidneys, bladder, genitalia)
- Anorectal malformation
- Genetic abnormalities
- Twin-to-twin transfusion syndrome

How Does Fetal MRI Work?
MRI is a big machine with a hole in the middle, like a tunnel. The mom lies on a table with her abdomen inside the tunnel. The machine takes pictures of the baby without touching the mother or the baby. It doesn’t hurt the mother or the baby. No dye (contrast) is needed. The machine will make different loud noises when taking the pictures. The pictures are then seen on a computer.

Is It Safe?
Yes, it is safe for both the mom and the baby. MRI doesn’t use any X-rays or any other type of radiation. It uses magnets and radio waves to take the pictures. MRI safety has been shown in many studies and is a widely used and safe exam.
What Should Moms Expect?

1. **Comfort**: The mom will lie down on a table, mostly on her back but sometimes on her side if that makes her more comfortable. Cushions and pillows will be used to help her feel comfortable.

2. **Noise**: The MRI makes loud knocking sounds. Don't worry; it's normal. You will get earplugs or headphones to help with the noise.

3. **Time**: The exam may take between 30 minutes to an hour. Try to relax and stay still so the pictures come out clear.

4. **Clothes**: Moms will be asked to wear a hospital gown so that there's no metal, like zippers or buttons which can interfere with the pictures.

5. **Feeling**: You won't feel any pain. Sometimes you may feel a very mild vibration from the machine working. If you ever feel uncomfortable or need to move to get your body adjusted inside the machine, you can press a button (which will be on your hand) to let the doctors know.

6. **After the MRI**

Once the pictures are taken you can go home or to your next appointment. Our team of expert doctor trained on fetal MRI will look at pictures. They will discuss with the referring physician about what they see. The referring physician will let you know what was seen and next steps.

**In Summary**

Fetal MRI is a way for doctors to see babies inside the mom's belly. It's safe and helps make sure the baby is doing well. If moms have questions, they should always ask their doctor. Remember, our doctors and staff are there to help and make sure both the mom and baby are healthy and happy!