Alliance Medical

MAGNETIC RESONANCE IMAGING (MRI) DURING PREGNANCY

Your doctor has asked that you have a specialised study called an MRI scan.

What is MRI?

Magnetic Resonance Imaging (MRI) is a cross-sectional imaging method using a powerful magnetic field, radio waves and a computer to produce detailed pictures of the body to help doctors diagnose and treat medical conditions. There is no x-ray radiation involved.

Are there any risks?

To date, there are no known biological effects on foetuses due to MRI scanning. However, there are a number of mechanisms that could potentially cause adverse effects as a result of the interaction of the electromagnetic field with the foetus and the resultant effects are uncertain.

Doctors and health professionals try to avoid MRI during pregnancy, particularly for elective studies or during the first trimester. However MRI still remains preferable to any studies using ionising radiation (such as x-rays and/or CT) and studies have shown that there is no clear evidence that MRI can adversely affect the outcome of your pregnancy. (International Commission on Non-Ionising Radiation Protection ICNIRP 2020).

The first trimester of pregnancy is the stage when the foetal organs are developing and therefore it is advised that MRI is avoided in this trimester unless your doctor feels it is crucial to your diagnosis and treatment.

What happens during the scan?

For most MRI scans you will be asked to lay on your back. As this can be uncomfortable and can cause problems with your blood pressure in later stages of pregnancy, the Radiographer will elevate your legs and place a sponge under one hip to help move the weight of your baby.

Loud noises are produced by the MRI machine during scanning, and you will be given hearing protection in the form of headphones or earplugs.

As your baby is surrounded by a large amount of amniotic fluid, research has shown that this is sufficient protection for your baby's hearing. (Radiology 2015; 275:2, 530-537; Am J Obstet Gynecol 1994; 170: 32-33; Br J Radiol 1995; 68: 1090-1094.)

It is normal during an MRI scan to experience temporary warmth and the temperature in the scanning room will feel cool to ensure that you do not get hot (J Pediatr Neuroradiol 2012;1(3)).

The standard length of the examination will be reduced to ensure your comfort and safety.

What happens when I arrive?

You will be asked to sign a consent form for the MRI scan which will be stored electronically with your images. This form will also be signed by the Consultant Radiologist who has decided that an MRI scan is the appropriate test for you at this time.

All patients are given a buzzer to hold during MRI scans, should you wish to stop the examination at any point you are encouraged to squeeze the buzzer and alert the Radiographer to any concerns.

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