

**MoH**  
**SALMANIYA**  
**MEDICAL COMPLEX**



**RADIOLOGY**  
**DEPARTMENT**

**MAGNETIC**  
**RESONANCE**  
**IMAGING (MRI)**

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*The aim of this guide is to inform you of what to expect when you visit the hospital for MRI examination.*

**WHAT IS MRI?**

MRI is an imaging procedure that combines a large magnet, radio wave and a sophisticated computer system to produce high quality pictures of the internal structures of the human body without the use of X-rays. The images produced are then viewed on a computer screen by a specialist doctor (Radiologist).

**WHAT IS MRI SCANNER LIKE?**

The scanner is a large magnet. In the middle is a tunnel in which the table top moves in & out. The patient lies on the table top. The tunnel is as long as your body and so you will be completely inside the magnet, unless you are having a scan of your feet or knees, when your head will be outside the scanner. The tunnel is wide, brightly lit and has a pleasant flow of fresh air to keep you comfortable.

**IS IT HARMFUL?**

There has been some extensive research into the effects of exposing the human body to the strong electromagnetic fields created by the Magnetic Resonance Scanner. To date there is no known evidence of any detrimental effects in the short or long term to people who have had an MRI scan.

There is, however, a powerful magnetic field surrounding the scanner **at all times**, which may prove to be a physical hazard to certain individuals e.g. persons fitted with heart pacemakers. For this reason some patients are not suitable candidates for a scan and will be prohibited from entering the scanner room. To help assess your suitability for MRI you will be invited to discuss and complete a safety questionnaire and consent form prior to your scan.

**HOW CAN MRI HELP ME?**

MRI is one of the most advanced imaging techniques available to patients. The resultant pictures are extremely detailed and show human anatomy accurately. They may help to diagnose illness earlier and may eliminate the need to undergo other medical investigations including surgical tests and biopsies. In your case the doctor thinks an MRI scan is the most appropriate test to help diagnose your condition, possibly leading to earlier treatment if it is required.

**MRI USES :**

The detail of MRI helps to identify disorder which have previously been difficult or impossible to visualize using conventional methods. This is especially so in the brain and spinal cord where it is now easier to diagnose diseases such as multiple sclerosis, spinal cord abnormalities, slipped discs, nerve root pressure, tumors etc. The internal organs in the

body can be seen e.g. heart, major blood vessels, liver, spleen, pancreas, kidneys and bladder. Bone and joints selected may identify torn ligaments, damaged cartilage's, muscular problems and bone changes.

#### **PATIENT SAFETY:**

Metallic items inside your body may mean that you are not suitable for an MRI scan. MRI contraindicated in patient with following things and should inform the Scanner suite if:

1. You have a pacemaker.
2. You have an artificial heart valve.
3. You have surgical or aneurysm clips in your head.
4. You have implanted metal in your body e.g. joint replacement, contraceptive coil, surgical clips.
5. You have sharpen wound.
6. You have a history of a metallic splinter entering your eyes.
7. There is a risk that you might be pregnant.

#### **DO I NEED ANY SPECIAL PREPARATION / DIET?**

You can eat and drink normally before and after the scan. Relax and continue with any prescribed medication. You may wear your own clothes for the scan providing they are metal free.

Before the test we will provide you with suitable gowns for you to wear. Avoid wearing eye make-up, hair spray, hair slides, hairgrips or jewellery as they may degrade your scan pictures. Dental fillings, crowns and caps will not cause problems but you may be asked to remove dentures and contact lenses before the

scan. Personal items such as watches, keys, coins, pens, spectacles, hearing aids, credit cards with magnetic strips etc, kindly handover these to your family member or to the MRI technologist.

*You may wish to leave most of these items at home as the hospital will not accept responsibility for any losses.*

#### **WILL I BE SEEN STRAIGHT AWAY?**

You should be seen within 30 minutes of your appointment time but please remember that sometimes we have to sac emergency cases which means you may be waiting longer. You may want to bring a book with you to help pass the time.

#### **WILL I HAVE AN INJECTION?**

Occasionally to gain extra information from the images you may be given an injection which will show up on the pictures.

#### **WHAT HAPPENS TO ME AFTER THE SCAN?**

There are no known side effects from this type of scan. You may leave as soon as the scan is finished.

#### **WHAT ABOUT THE RESULTS?**

The pictures contain much complex information that may take the radiologist up to one week to interpret, the results are then sent to X-ray office. CPR must be shown when receiving MRI or X-rays results.

#### **I AM STILL WORRIED ABOUT THE SCAN, WHAT SHOULD I DO?**

Telephone the radiographers who will be more than happy to answer any of your questions.

*Please feel free to ask about all aspects of your test. We welcome all inquiries and can help to*

*allay fears and anxieties about the procedure.*

#### **REMEMBER**

- \* **The MRI scanner is one of the best methods of demonstrating your problem.**
- \* **There are plenty of sympathetic members of staff around to help you through your scan.**

**The waiting list for MRI is very long so it is important that you contact us if you cannot attend.**

#### **WHO SHOULD I ASK IF I HAVE ANY FURTHER QUESTION?**

Please feel free to ask about all aspects of your scan. We welcome any enquiries and can quickly help to allay any fears and anxieties about the procedure. We want you to feel as confident as possible for your scan.

We hope you have found this guide interesting and informative, any comments will be welcomed to help our efforts to improve service to you.

*Although we endeavor to keep the stated appointment time, this may not be possible in the event of an emergency.*

#### ***Address for any communications:***

MRI Suite, Radiology Department, SMC, PO Box 12, MoH - Manama, Bahrain  
Tel. MRI No. (1) 17284014  
MRI No. (2) 17285054  
Appointment 17284018  
For further enquiry 24 Hrs. 17284084  
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