

# MAGNETIC RESONANCE IMAGING (MRI)



P. D. HINDUJA HOSPITAL  
& MEDICAL RESEARCH CENTRE

## What is an MRI scan

Magnetic Resonance Imaging, or MRI, is a painless, diagnostic test that allows radiologists (doctors who specialize in the use of imaging) to see inside some areas of the body which cannot be evaluated using other modalities

## What to do to prepare for your scan

- **Food and drink** - You may eat or drink anything you like before a typical MRI test. If you are having your abdomen / pelvis scanned (including MRCP), it may be necessary for you to fast for 4 hours before the test. If the patient requires anesthesia, please refer to the guidelines below
- **Medications** - It is important for you to keep to your regular medication schedule unless advised by your doctor.
- **Safety** - MRI scanners do not use x-rays. Instead, they use a very strong magnet and a radio frequency. It is important to tell the MRI technologist if there is a chance you could be pregnant. There is no evidence that MRI is unsafe for a developing fetus, (however, it should be used with discretion).
- **Surgical implants** - Patients with any kind of metallic implant anywhere in the body should not have an MRI unless their physician or radiologist is fully aware of the device and has approved the MRI procedure. **Patients who have a pacemaker, cochlear implant or infusion pumps should not undergo an MRI.**
- **When to arrive** - You should arrive 15 minutes before your scheduled appointment. This allows time for you to complete any necessary paperwork, change your clothes for your scan and discuss about your medical history with our doctors before we start your scan. We suggest that you call the hospital on 022 - 24447567 before starting from home so that we can inform you in case there is a delay. Please bring all your relevant previous investigations and doctors notes.

## **What happens during the scan**

- **Clothing / Metallic objects** - For all MRI scans, you most likely will change into a hospital gown. Our changing area is private and there is a secure locker for your clothes. It is best, however, if you leave valuable items at home. If you are wearing anything metallic, such as jewellery, dentures, glasses or hearing aids, that might interfere with the MRI scan, we will ask you to remove them. You should not have your credit / debit cards in your pockets during the scan because the MRI magnet can affect the magnetic strip on the card. Patients who are undergoing a brain scan should not wear make-up as some brands contain metal.
- **Scanning** - Before the scan, your detailed history will be taken by the Radiologist. Your technologist will then bring you into the MRI scan room where you will lie down on the patient table. The technologist positions the part of your body to be scanned in the middle of the large cylindrical magnet. The scanner does not touch you, nor do you feel anything. Because the scanner does make a loud knocking noise when it takes the images, the technologist will give you cotton plugs and /or headphones to dampen the sound. The technologist leaves the room, but is in full view and communication with you through the observation window and microphone in the adjoining room. You will be given a "rubber squeeze" which can be pressed if you are uncomfortable or want immediate attention. It raises an alarm so that the scanner can be stopped and the MRI technologist can come and assist you. It is important for you to lie very still and, at some points, you may be asked to briefly hold your breath as the image is taken.
- **Length of scan** - Each MRI scan is individualized and tailored to each patient's needs. So, if you've had a MRI scan before, don't be concerned if this one is longer or shorter. After your preliminary scans, if you require a contrast medium, the technologist will bring you out of the magnet and the Nurse / Radiologist will inject the contrast into the IV placed in your arm. The technologist then returns you to your original position in the magnet. Since we need the images before and after

the contrast injection to exactly coincide, it is important that you do not move while the contrast medium is being administered. After all the images are taken, you will be brought out of the scanner room. You may then get dressed and leave.

- **Contrast medium-** Contrast medium, (sometimes called dyes) highlight your organs and blood vessels and help the radiologist to see them better. At a prior time, you may have already been exposed to a contrast medium if you have had a kidney scan, angiogram or a CT scan. The contrast material used is safe and does not contain iodine. The incidence of reaction is extremely rare. In fact, most patients will feel nothing at all during or after the injection. However, **if you suffer from kidney problems, please inform our staff.**

### **What happens after the scan**

You have no restrictions after having a MRI scan and can go about your normal activities.

- **Results / Reports** - The radiologist will read the scans within 24 working hours, In urgent situations report can be made available. Your reports along with films and a CD containing all images can be picked up from the MRI reception between 6 - 8 pm the next working day.

### **Pediatric imaging / anaesthesia guidelines**

1. Bring warm socks, cap & a shawl when a child is brought for MRI test.
2. If the child has URTI (Cough/cold) please check with the hospital and reschedule the appointment.
3. General anaesthesia / sedation is required in children/some adults.
4. The MRI scan lasts for about 40-60 minutes during which the patient is required to lie still. It is understandable that most children will not be able to do so. In this situation necessary medication shall be administered to the child by a qualified anaesthetist to calm the child down. During the procedure the child shall be monitored continuously by the anaesthetist.

5. MRI is a diagnostic procedure and administration of general anaesthesia / sedation may pose increased risk in view of associated medical illness. These may be discussed with the anaesthetist.

It is necessary for the anaesthetist to evaluate the child before the MRI so it would be in the interest of the child if the anaesthetist can be consulted prior to the MRI appointment. You can call the MRI reception and taken an appointment with /speak to the anaesthetist. By and large, the child should continue taking all the medications he or she is on. Especially, **antiepileptics should be given to the child even on the day of the scan if a dose is due.**

- **If the patient requires sedation / anaesthesia the following Fasting guidelines need to be followed:**
  - i. If the child is < 1 year of age : Fasting for 4 hours. However for 2 hours before the procedure, clear fluids like plain water are allowed. No breast milk should be given 4hrs before the procedure.
  - ii. If the child is > 1 year of age: 6 hours fasting from solid foods is required. However, 2 Hours before the procedure the child can have water, but no milk should be given to the child.
  - iii. Adults > 8hrs fasting / preferably overnight
  - iv. **Note:** All children requiring sedation are scanned in the morning hours. They are taken in for scan as per the decision of the anaesthetist. Hence, please note that even if you have a fixed appointment it is possible that the child will be taken in earlier / later than the given time slot.
  - v. 2 hours after the procedure the child can be started on clear fluids and if he/she does not vomit, 1 hour later semi-solid foods or milk can be given.

## **Discharge (Post Anesthesia / Sedation)**

The patient will be observed for 1-2 hours in the recovery area and discharged thereafter.

### **Appointments for MRI can be taken at 022 - 2444 7567**

From : Monday to Saturday 8:00 am to 7:00 pm

Reports can be collected from MRI counter on the  
next working day from 6:00 pm to 8:00 pm  
on later working days from 9:00 am to 8:00 pm

### **For online reports log on to**

[http://www.hindujahospital.com/for-patients/  
diagnostic-report/](http://www.hindujahospital.com/for-patients/diagnostic-report/)

Veer Savarkar Marg, Mahim, Mumbai - 400 016 (INDIA)

Tel: 022 - 2445 1515 / 2445 2222 / 2444 9199 Fax: 022 - 2444 9151

[info@hindujahospital.com](mailto:info@hindujahospital.com)

[www.hindujahospital.com](http://www.hindujahospital.com)

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