

# Magnetic Resonance Imaging

Magnetic Resonance Imaging (MRI) is a procedure that is non-invasive and does not involve the use of any radiation. MRI uses a very strong magnet, radiofrequency pulses and a computer to produce detailed images of organs, tissues, bone and other internal structures of your body. A radiologist interprets these images to aid in the diagnosis and treatment of certain medical conditions.

Dasman Diabetes Institute houses two state-of-the-art machines (1.5 Tesla – wide-bore & 3 Tesla) for comfortable and precise imaging.

In case you are claustrophobic, please talk to your referring doctor prior to the appointment. **Note:** *Procedures under anesthesia are not performed at our Institute.*

## Implants

As MRI involves a magnetic field, you will be asked metal safety questions at the time of your appointment. While many implants are compatible with the MRI machine, certain implants may not be allowed inside the scan room for safety reasons. Some examples of such implants are listed below:

1. Cardiac pacemakers
2. Prosthetic heart valve (old type)
3. Intracranial aneurysm clips
4. Ferromagnetic implants e.g. in middle ear
5. Metallic foreign body (specially insulin pump, intra-orbital implant, intra-osseous implant, bullets, shrapnel)
6. Neurostimulators
7. Metal particles or chips in your eye and retinal tacks
8. Magnetically activated biomedical device (such as a defibrillator, eye implant or ventricular peritoneal shunt)

It is helpful to have the make and model of the implant handy to make this verification process easier. By informing the radiology personnel of any metal implants in advance, your safety can be ensured and necessary modifications to procedures can be done. In certain cases, a clearance from your doctor regarding the implants will be required to facilitate a smooth appointment.

The following items should be removed prior to your examination:

1. Hearing aid
2. Dentures
3. Watches, eyeglasses
4. Hair wigs and hairpieces
5. Bank magnetic cards
6. Coins, keys, pens and jewelry
7. Eye-make-up or mascara

It is recommended not to use hair gel or have wet hair as this can deflect the magnet signal. Dental fillings, hip replacements, knee replacements and contact lenses are acceptable.

### What to bring on the day of your appointment:

Please bring your prescription, civil ID and insurance card to the appointment. Also bring reports, CDs, films, etc. of any prior relevant studies (such as X-rays, MRI scans, CT scans) you may have undergone, for comparison purposes.

### Preparation:

- **Magnetic Resonance cholangiopancreatography (MRCP):** If you are having an MRCP, you will need to fast for four hours prior to examination.
- **Contrast studies:** If your doctor has ordered a MRI exam with contrast, you will be required to fast for four hours. You can continue taking your routine medications on the day of the examination. However, you should not take any morning dose of insulin. You will also have to bring blood reports showing your kidney function tests (especially creatinine levels). The blood report must be within four weeks of your exam.

### On the day of the appointment:

- Please arrive at the Diagnostic Imaging Reception at least 30 minutes before your test. This allows plenty of time for the registration process including cashier stamp. Failing to attend within 20 minutes of the given appointment time will unfortunately lead to its cancellation.
- Parent or guardian of patient younger than 16 years of age must accompany the patient.
- Kindly inform the receptionist in case of any history of allergy, asthma, presence of any implants, surgeries involving any type of implants or suspicion of pregnancy. If there is any possibility of pregnancy, please talk to your doctor and inform the reception at the time of appointment. Inform the MRI technologist at the time of the scan as well.
- You will be asked to change into a gown before your exam. Lockers are provided to store your belongings for the duration of the scan. It is advisable that you leave all valuables at home.
- All metallic objects such as piercings, jewelry, hairpins, coins, phones, wallets, watches etc. will have to be removed prior to scanning. A metal safety questionnaire will be duly filled along with other necessary paperwork.
- Once cleared, you will enter the scan room under the supervision of an MRI technologist. Depending on the constraints of the examination you are undergoing, you will enter the machine on a sliding table head-first or feet-first. The body region of interest will be positioned at the center of the scanner. You will be able to communicate with the technologist via an intercom system.
- You will have to lie down still for the entire exam without moving as even small movements can result in blurred images. For certain examinations, you may be asked to hold your breath for up to 20 seconds while acquiring different sequences. The machine makes loud noises while scanning. You will be given

## Diagnostic Imaging Center

ear plugs or a headset to help minimize the noise.

Generally, examinations take about 30 to 60 minutes to complete.

### After your test:

- On completion of your MRI scan, you will be guided back to the dressing room. Following contrast studies, you will be asked to stay so that you can be monitored for some time. For non-contrast exams, you can usually leave and resume your regular activities.
- Our dedicated radiologists will interpret your MRI images and make a report. You will be provided with a CD containing your MRI images and a hard copy of your report.
- Please stop by the reception to get your dispatch card, which, you will produce along with your civil ID to receive your results. Our reports are generally dispatched between 12:00 – 2:30pm only on working days.

### Contact Us:

For any inquiries, cancellations or for rescheduling your appointment, please contact us at +(965) 1877 877 ext: 7000, 7001 or +(965) 2221 6047 or on WhatsApp +(965) 6505 5011

