

Patient Information for Magnetic Resonance Imaging

Your doctor has requested that you have a Magnetic Resonance Imaging examination or MRI. This is a new and safe method of imaging inner body structures. It does not involve the use of x-rays or radioactivity. Instead, magnetic fields and radio waves are used to generate signals from the body. These signals are collected by receivers or 'coils' designed specifically for each body part. Computers process these received signals to form images of the inside of the head, body, or limbs. Our radiologist will study your images and send a report to your doctor.

PRECAUTIONS Due to the use of strong magnetic fields, certain metallic implants or electronic devices may be disrupted. It is essential that you inform your doctor or our office, before your appointment date, if you have any of the following:

- **pacemaker or other electronic stimulatory device**
- **brain aneurysm clip**
- **ear or eye implant**
- **artificial heart valve**
- **metallic stent, coil, catheter, or filter in any blood vessel**
- **any history of eye injury involving metal or metal fragments**
- **surgery in the past 6 weeks**

In some cases we may need to review your operative reports, prior to arranging an appointment to determine the MRI compatibility of your particular implant device. Orthopedic hardware such as hip pins or bone screws are generally made of non-magnetic materials. They may cause some MR image distortion if located in the region of interest but are not at risk of being dislodged.

Please also contact us:

- if you are or may be pregnant. Although there are no known biological effects related to fetal MRI exposures, as a safety precaution, pregnant patients are generally not imaged using this method.
- if you have worked as a metal worker, machinist, or welder. You may be asked to have an eye x-ray prior to your MR exam to rule out the presence of metal fragments in or near the eye.
- if you are unable to lie very still on your back for periods of 10 minutes or more.
- if you have had surgery in the past 6 weeks.

PREPARATION There are no special dietary restrictions or preparations. You may eat and take any medications as normal. Other preparations:

1. Metal on the body or in clothing may influence magnet fields and 'scramble' essential data. You may choose to arrive wearing clothing with no metal snaps or zippers, or you can change into a pair of our hospital pyjamas. You will also be asked to remove all jewelry, watches, hair pins, coins, credit cards, etc. Gold is non-magnetic, so if rings can not be removed, they may be worn into the magnet. A locker will be provided for safe-keeping of your belongings. For head and neck imaging, dentures must be removed, but these can be retained until just prior to imaging.
2. Avoid wearing eye makeup as some forms employ metallic pigments that may cause MR image distortion and eye irritation. Please contact us if you have tattooed eyeliner as it may contain metallic pigments.
3. For the protection of other patients and staff who may have severe allergies, we have a strict no-fragrance policy. On the day of your MRI appointment **DO NOT APPLY ANY SCENTED PRODUCTS:** cologne, after shave, perfume, aroma therapy, scented hair products, scented body lotions, etc. Our departmental policy defines that if you arrive for your appointment wearing scented products you may be asked to reschedule.

If you know that you suffer from severe anxiety or claustrophobia (fear of small spaces), e.g. you can not ride in elevators or airplanes, you may wish to take some mild sedation. You must make arrangements for this sedation with your own doctor. The MRI department does not dispense medications. If taking sedation you can not drive home afterwards, please have someone accompany you or plan to return home via public transit or a taxi.

YOUR MR EXAMINATION The experience of having an MR examination is similar to that of a CT or CAT scan, which you may have had already. A technologist will position you on the scanning table and will secure the region of interest. Please feel free to mention any special physical limitations you may have and to suggest ways to make your examination more comfortable. Once positioned, you will then be advanced to the center of a large magnet. You will hear knocking sounds when imaging commences (this loud knocking sound is caused by rapidly switching secondary magnetic fields used to locate MRI signals). The technologist will remain in contact with you throughout your examination through an intercom system. You may also contact the technologist at any time by pressing a call bell.

The most important thing to remember is to keep very still while you hear the knocking sound. If you move, the images will be blurred and therefore not helpful for your diagnosis. The total exam times vary from 20 minutes to 2 hours, and is made up of segments lasting about 5 minutes each. Sedation is seldom necessary. In fact, most patients, after settling, take the opportunity to relax. You may listen to music during your scan. You may bring your favourite cassette tape or compact disc, or choose one from our selection.

For answers to frequently asked questions about MRI, please visit our website:

www.ubcmri.ca

HOW TO FIND US Please visit our web site for bus and car travel directions.

Parking:

- in the Parkade behind the hospital (\$1.25 for each half hour Monday to Friday, or \$3.00 flat rate on the weekends and on weekdays after 5:00pm),
- in B1 lot located just east of the hospital on Wesbrook Mall (\$3.50 all day),
- in front of the hospital near the emergency entrance (\$1.25 each half hour),
- metered street parking. Caution! If time runs out on the meter or if you park in a restricted area, you risk being ticketed or towed.

MRI is located in the basement of the Purdy Pavilion (Extended Care Unit) at the UBC Hospital. Within the hospital complex, our building is easily identified as the one with red panels under its windows, adjacent to the main, acute care/emergency building. Enter this building and take the elevator down to the Ground Floor. Follow the signs to MRI.

**** Note, we are not located in the Radiology Department.**

If you have not been out to UBC before, please allow adequate time to arrive on time for your appointment. *Thank you.*

