SAFETY PRECAUTIONS

Because of the strong magnetic field, MRI scans <u>may not always</u> be recommended for patients with certain:

- pacemaker
- Implanted Cardiac Defibrillators (ICD's)
- blood vessel clips (ie: brain aneurysm clips)
- implanted pumps/shunts/stimulators
- metal in the eyes or sockets
- hearing implants (ie: cochlear implants)
- artificial limbs
- · other implanted metal devices

All persons must remove metal objects such as watches and jewelry before entering the MRI scan room.

As a precaution, pregnant women are not given MRI scans unless there is no alternative imaging option.

If you are claustrophobic, please discuss medication options with your doctor prior to arriving for your appointment.

Please advise your doctor and the technologist performing the procedure of the following:

- If there is any possibility that you could be pregnant
- If you have any allergies
- If you have had a previous allergic reactions MRI Contrast
- If you have a history of asthma, heart, or kidney problems or sickle cell anemia
- Any medications you are taking
- Any surgeries you have had within your lifetime



WHO REPORTS THE TEST?

Results are reported by radiologists - doctors who are specialized in reading x-ray images. Your doctor should receive a signed report **within 10 business days**. You should follow-up with your doctor to discuss the results of your test.

FOR FURTHER INFORMATION

For more information on specific MRI examinations, ask the technologist who performs your exam or visit:

www.easternhealth.ca

Go to the "Our Services" tab, Select "Medical Imaging"

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MAGNETIC RESONANCE IMAGING (MRI)

MRI is performed by a technologist who is specially trained in Magnetic Resonance Imaging

MRI provides detailed pictures of the body without the use of x-rays. It uses magnets, radio waves and a computer to produce images of the body.

MRI scans provide greater detail of body tissues and organs, which show soft tissue structures and pathology

MRI scanners can more accurately detect conditions of the brain, spinal cord, abdomen, pelvis, heart, bones and joints

It is commonly used for:

- Soft tissue and joint injuries
- Diagnosing heart conditions
- Examining the pelvis and abdomen
- · Examining the brain and spinal cord
- Detecting cancer and other pathologies

PREPARATION

Preparation varies by procedure. Instructions for preparation are specific to the examination you are booked for and will be included in the letter you receive to advise you of your appointment date and time. The doctor who ordered your examination may also give you information about the required preparation.

Prior to the examination, patients are asked to remove jewelry and metal objects and to wear a gown. You will be asked not to wear any makeup, hair products, or piercings on the day of the exam.

PROCEDURE

The MRI machine is a large, round magnetic tube. The patient lies on the table with either feet or head first, depending on the area of the body to be scanned.

Contrast may be injected to show blood vessels and organs more clearly. In some cases, especially with patients who are claustrophobic, a mild sedative may also be used (this has to be given to you by your doctor)

The head, arms or legs may be secured with straps to prevent movement. The table then slides into the magnetic chamber.

Inside the chamber patients feel air moving around and hear loud thumping sounds. The thumping indicates when the MRI scans are being taken.

Patients should not feel any discomfort from the magnet or radio waves nor should they have any after effects from the examination. During the procedure, it is important for you to remain still to avoid blurring of the images. MRI scans take about 30 minutes for most procedures; however more complex procedures could take up to 2 hours.

BENEFITS & RISKS

BENEFITS

- MRI produces very detailed pictures of soft tissues, allowing for the accurate diagnosis of many conditions such as tumors and other abnormalities, which may not be visible with other imaging methods.
- MRI is the only imaging tool that can diagnose Multiple Sclerosis.

RISKS

- Undetected metallic implants may cause serious injury or harm if the technologist does not know about them before having your MRI scan. Every patient has to undergo a screening process to discuss surgeries and implants which may be a contraindication to having the MRI.
- The MRI scanner is very loud and hearing protection must be worn at all times while being in the machine.
- Contrast materials used in the procedure have little likelihood of allergic reactions.