WHAT IS MAGNETIC RESONANCE IMAGING?

Instead of using radiation (in normal x-rays or a CAT scan) or sound (ultrasound), Magnetic resonance Imaging (M.R.I.) uses magnetic energy to get the information for a computer to generate pictures of the body. The picture in general can be far better than images gained by other means. Different types of images can also be generated. They are generated by turning a giant magnet on and off and measuring your natural magnetism at certain times.

WHY ARE YOU HAVING AN M.R.I.?

There is probably more information needed by your doctor either to help with surgery or to determine if surgery is needed.

WHO CAN ORDER AN M.R.I.?

Usually only a specialist can order an M.R.I. if you wish to get the medicare rebate. If not it can be ordered by your local doctor.

WHAT IS IT USED FOR?

It can show much more detail than a normal CAT scan. Blood vessels can be looked at for abnormalities. It can be used to screen for certain conditions. It can be used to add further information needed to make surgery safe.

Spine/spinal cord
It may show a disc prolapse not seen on a CAT scan. It shows the spinal cord which is not seen well on CAT scan. It shows the quality of your discs. It can diagnose some neurological conditions.

The brain
It reduces the need to get an angiogram to look at the cerebral vessels when looking for abnormalities. It may show things not seen on a CAT scan. It will help diagnose some conditions.

Nerves in the limbs.
It can show compression in the nerves in your hands or leg. It is used to show tumours in nerves.

WHAT HAPPENS?

You should turn up for your appointment at least 15 minutes early to allow for getting changed and so that some checks can be made.

You can eat and drink before the M.R.I.

The magnet will destroy anything magnetic so do not take credit cards/phone cards/watch or anything metallic into the machine.

The scan will take anything between 20 minutes and 1 hour but is usually about 45 minutes.

They will check if you have any metal in you with a metal detector. You may even require some Xrays to check this (see later).

You will get into a gown and go into the M.R.I. room which is magnetically shielded. If it is a spinal M.R.I. you will lie on a special sensor but if it is of your brain you will place your head into a special coil as seen in the picture.

A special type of conveyer belt takes you fully into the machine. It is usually a close fit. You have headphones to listen to some music. A fan blows air through the tunnel to keep you cool.

The images are no good if you move so it is very important to keep still.

You can contact the technician by a buzzer and they can hear you. They will give instructions from time to time. If you need to get out push the buzzer to let them know.

There is a lot of loud banging while the machine works (this is normal). If you need contrast you will be brought out of the machine and this is injected into a vein and you go back in.

When it is finished you can go home. The pictures and report are usually sent to the doctor who referred you, but sometimes you will be requested to pick them up.
WHAT DO YOU NEED TO TELL THE DOCTOR BEFORE HAVING AN M.R.I.?

Precautions

Usually you cannot have an MRI if you have
- Cerebral Aneurysm clips
- Metal clips in head for other reason
- Cardiac pacemaker
- Some types of CSF shunts
- Ear implants (e.g., bionic ear)
- Metal artificial heart valves
- Spinal cord stimulators or other types of stimulator
- Infusion pumps (e.g., morphine or Baclofen)
- Metal fragments in eyes or body
  (tell us if you were in a war or ever been a welder)

If there is a doubt about you having a contraindication then either your doctor will be contacted or you may be reappointed. Sometimes you will have an X-ray of your eyes or other parts of the body just to make sure.

Pregnancy

Please let us know.
If the test can be avoided we would, especially in the first three months. There are some sites that use the MRI to actually look at the baby and also do an MRI to avoid normal X-rays so it is not totally contraindicated.

Claustrophobia

This is the fear of enclosed places. If this is a problem then tell us before we book the scan. The reason for this is that there are scanners called OPEN MRI units. These are not as enclosed as normal machines. The only problem is that the pictures from an open scanner are usually not as good. If the pictures need to be done on an enclosed machine then sedation may be required and we like to organise this prior to your scan.

Contrast

This is not the same as X-ray contrast so that even if you are allergic to X-ray contrast you can usually have the MRI contrast which is injected. Contrast is not always needed.

How much and who Pays the bill

This depends not only on where you are having the MRI but also why.
If it is a workcover problem then they usually pay the bill.
If it is not workcover and you are going to a registered scanner then Medicare will pay part or all of the bill. There is usually some out of pocket expense and it depends on where the scan is done as to how much this is.
If the scanner is not registered then Medicare does not pay a component of the bill and the fees vary greatly for this scan.

Disclaimer

This brochure is to provide general information and does not replace a consultation with your doctor.

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