

## **New Zealand Paediatric Neurology Clinical Network**



# MRI - Magnetic Resonance Imaging

### What does MRI mean?

Investigation of complex organs like the brain requires the use of highly technical equipment. This scanning machine produces a series of pictures of the brain.

MRI provides us with the detailed information needed to carefully examine the subtle differences in structure, tissue type and chemical state.

It is more useful than X rays or CT scanning in children for the detection of very small abnormalities that can cause seizures or developmental delay.



#### How is it done?

The images of the brain are produced on computer using radio waves and a magnet.

#### Does it hurt?

No. Your child will not feel anything or experience any effects afterwards. A very loud knocking sound can be heard coming from the scanner. This is normal. Your child will be given ear plugs. There is no radioactivity present at any time.

It is important to ensure your child is not wearing any metal objects, ie earrings, hairclips, watches. This is a necessary safety measure as the MRI generates a very strong magnetic field.

## What does my child have to do?

Your child will be required to lie very still on a bed within the centre of the scanner. The scanner is large and round with a hole in the centre.

If an anaesthetic is required your child will be admitted to hospital. Prior to the scan parental consent will be obtained and your child will be fully assessed by an anaesthetist. Following the scan you will be required to stay for a recovery period. Information regarding general anaesthetic preparation will be forwarded to you with your appointment details.

The scanner can make some people feel claustrophobic. Here is a link to a great Youtube video for kids which explains what happens in an MRI scan:

https://www.youtube.com/watch?v=duQR23cR5Gs



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# How long does it take?

Approximately one hour is allowed for the whole procedure. If an anaesthetic is required it will take longer and you will need to keep your day free.

### Who does it?

A qualified radiographer from the radiology department. If your child is awake, the radiographer will remain in constant contact to reassure them throughout the scan. A favourite soft toy or comforter to accompany them can be helpful.

## Will we get the results straight away?

The radiologist and your specialist need to carefully examine and interpret your child's scan. A copy of the report will be sent to the doctor who requested the MRI scan as soon as possible. This should occur within ten days.