## Radiology Tasmania

# Gadolinium Contrast Medium

### **Patient Information**

#### What is Gadolinium Contrast Medium?

Gadolinium contrast media are chemical substances used in Magnetic Resonance Imaging (MRI). When injected into the body, Gadolinium Contrast Medium makes certain tissues, abnormalities or disease processes more clearly visible on MRI. When this substance is present in the body, it alters the magnetic properties of nearby water molecules, which enhances the quality of MR images.

The contrast medium is passed from the body naturally through the kidneys.

#### How is Gadolinium Contrast Given?

Prior to contrast being administered, your health status will be assessed and you must notify staff if you have any allergies.

Gadolinium Contrast is given to you as an injection into the back of your hand or elbow. This will be performed while you are in the MRI scan room by a Radiographer (health professional) trained in administering intravenous injections.

Most patients do not notice any sensations, although a small number of people may report a cold feeling in the arm.

You may be asked to remain within the practice for a short time following an injection of Gadolinium.

#### What are the risks of Gadolinium Contrast?

Gadolinium Contrast Medium is generally very safe. Side effects or reactions are uncommon but may

occur. The most common adverse reactions are brief headache, nausea and dizziness. Gadolinium is less likely to produce an allergic reaction than the iodine based materials used for CT scanning. Some people can experience a mild reaction with symptoms of hives and itchy eyes. Mild reactions often settle themselves within an hour or so, or may be easily controlled with medication.

Severe reactions are extremely rare. Symptoms may include difficulty breathing and swelling of the lips and mouth. Staff at Radiology Tasmania are well equipped and trained in how to treat adverse reactions should they occur, and reactions generally respond very well to medical treatment.

Nephrogenic systemic fibrosis (NSF) is an adverse effect that has been seen in patients with severe renal failure. NFS causes swelling and tightening of the skin and can cause internal organ damage which may be life threatening. For this reason, Gadolinium contrast is usually avoided in patients with reduced kidney function or kidney failure. It is important that you advise us if you have kidney disease or kidney failure. Our Radiologist assesses each case to determine appropriateness of Gadolinium Contrast.

Information is from Inside Radiology, Royal Australian and New Zealand College of Radiology (RANZCR)