MRI Dobutamine Stress Study

A. Interpreter / cultural needs

An Interpreter Service is required? □ Yes □ No
If Yes, is a qualified Interpreter present? □ Yes □ No
A Cultural Support Person is required? □ Yes □ No
If Yes, is a Cultural Support Person present? □ Yes □ No

B. Procedure

The following will be performed (Doctor/doctor delegate to document – include site and/or side where relevant to the procedure)

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The following will be performed:

A Dobutamine Stress MRI uses a MRI machine to create images of your heart as it is beating. It looks at how well your heart is functioning. To do this you will receive a medication (Dobutamine) that reproduces the effect of exercise on the heart and makes the heart work faster and harder.

C. Risks of the procedure

In recommending a Dobutamine Stress MRI, the doctor believes the benefits to you from having this procedure exceed the risks involved.

The risks and complications with this procedure can include but are not limited to the following.

The main risks of this study are associated with the drugs that are used.

Common risks and complications of Dobutamine include:

- Mild angina.
- Shortness of breath.
- Musculoskeletal discomfort.

Less common risks and complications of Dobutamine include:

- No known less common risks of Dobutamine.

Rare risks and complications of Dobutamine include:

- Abnormal heart beat, that usually settles without treatment.
- Build up of fluid in the lungs. You may need medication to treat this.
- Chest pain. This is treated with medications.
- Heart Attack.

D. Risks of MRI Contrast for patients with renal impairment

Specific Risks of MRI contrast to patient’s identified as having Renal Impairment

- People whose kidneys are damaged (known as ‘Renal Failure’) cannot remove MRI contrast from the body. This may lead to a very rare disorder called Nephrogenic Systemic Fibrosis (NSF).

NSF is a condition that results in scarring or thickening of the skin and tissues throughout the body. This scarring can lead to a tightening of muscle, tendons, ligaments, or skin that prevents normal movement and function. This condition is severely disabling and may result in death.

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Common risks and complications of the actual procedure include:

- Minor pain, bruising and/or infection from the IV cannula. This may require treatment with antibiotics.

Less common risks and complications of the actual procedure include:

- An allergy to injected drugs, requiring further treatment.
- The procedure may not be possible due to medical and/or technical reasons.

Rare risks and complications of the actual procedure include:

- Death as a result of this procedure is very rare.
E. Patient consent

I acknowledge that the doctor/doctor delegate has explained the proposed procedure.

I understand:

- the risks and complications, including the risks that are specific to me.
- that no guarantee has been made that the procedure will improve my condition even though it has been carried out with due professional care.
- if immediate life-threatening events happen during the procedure, they will be treated based on my discussions with the doctor/doctor delegate or my Acute Resuscitation Plan.
- a doctor/doctor delegate undergoing further training may conduct this procedure.

I have been given the following Patient Information Sheet/s:

- [ ] MRI Dobutamine Stress Study
- [ ] MRI Contrast

I was able to ask questions and raise concerns with the doctor/doctor delegate about the proposed procedure and its risks. My questions and concerns have been discussed and answered to my satisfaction.

I understand I have the right to change my mind at any time including after I have signed this form but, preferably following a discussion with my doctor/doctor delegate.

On the basis of the above statements,
1. What is a Dobutamine Stress MRI?
Magnetic Resonance Imaging (MRI) is an advanced imaging method that uses a strong magnetic field, radio waves and a computer to produce pictures of the body. MRI does not use x-rays.
MRI pictures are very detailed. They can show both bones and soft tissues in the body.
A Dobutamine Stress MRI uses a MRI machine to create images of your heart as it is beating. It looks at how well your heart is functioning. To do this you will receive a medication (Dobutamine) that reproduces the effect of exercise on the heart (stress).
While your heart is ‘stressed’ MRI Contrast is used to examine the blood supply to your heart. For more information on MRI contrast and the risks involved in its use, please read the MRI Contrast Patient Information Sheet (if you do not have this information sheet please ask for one).

MRI Safety
- No one is permitted into the scanning room until they have answered a series of safety questions. All metal objects must be removed from their body. (eg jewellery, eyeglasses and mobile phones).
- Because of the strong magnetic field there will be some patients who have metallic implants that cannot undergo MRI. These implants include but are not limited to: heart pacemakers, aneurysm clips (in the brain), and foreign bodies such as metal shavings in the eyes.
- It is vital that you answer the safety questions as best as possible. You should discuss any internal implants (of any kind) that you may have with MRI staff to clarify any risks.

2. Will there be any discomfort, is any anaesthetic needed?
An MRI Scan is a painless procedure, no anaesthetic is required.
Although, with the medication given in this procedure, you may develop chest pain, shortness of breath or major changes in your heartbeat, you will be closely watched by a Doctor.
Some people find that being inside the MRI machine makes them feel uncomfortable due to the confined space of the tunnel. This is known as ‘claustrophobia’. If this occurs, let the staff know as there are many different ways they can help you.
Rarely, medication may be required to help you complete the scan. If you require medication for the scan please check the procedure with MRI staff.

3. Preparation for the procedure
The medical imaging department will give you instructions on how to prepare for your scan.
- Take your usual medication, unless your doctor or hospital has advised otherwise and bring a list of your medications to your appointment
- Please tell the staff if you are or suspect you might be pregnant or are breastfeeding.

4. During the procedure
Before you are taken into the scanning room,
- An electrocardiogram (ECG) may be taken. This is a paper recording of your heartbeat.
- A fine needle (IV cannula) is placed in each arm.
- Your pulse, blood pressure and heartbeat are monitored during the study. If the doctor is worried about these, the study will be stopped.

The procedure is performed in three parts:
First Part - MRI scans are done
You will not feel anything during the scan. The radio waves used to take your pictures are very noisy; you may hear thumping, and knocking sounds. You will be provided with headphones or earplugs to protect your ears from the noise.
MRI staff will not be in the room with you during the scan but they will be able to see you on a monitor and talk to you between the scans via an intercom system. You will be given a call button to use if you need help. It is extremely important that you keep your whole body completely still during the scan. Any movement can blur the pictures.

Second Part - Your heart is ‘stressed’ with a medication called Dobutamine. Scans are taken while your heart is ‘stressed’. Varying doses of Dobutamine will be injected and scans will be repeated. This will help show the function of your heart. You will likely
feel your heart beating harder and faster during this time. A doctor will be in the scanning room, closely monitoring you during this time.

When the Dobutamine is injected you may feel side effects such as:
- Headache, nausea, vomiting, restlessness, muscle cramps or weakness, chest pain, shortness of breath (feeling puffed), dizziness, palpitations and rash.

If you feel unwell you should tell staff at once.

MRI Contrast may also be injected to look at the blood flow through your heart.

Third Part - After a short break, more scans are taken.
At the end of the study another ECG may be done and the IV cannulas are removed.

5. After the procedure
Staff will discuss with you what level of activity is suitable after your procedure.

6. What are the risks of this specific procedure?
The risks and complications with this procedure can include but are not limited to the following.
The main risks of this procedure are associated with the drugs that are used.

Common risks and complications of Dobutamine include:
- Mild angina.
- Shortness of breath.
- Musculoskeletal discomfort.

Less common risks and complications of Dobutamine include:
- No known less common risks of Dobutamine.

Rare risks and complications of Dobutamine include:
- Abnormal heart beat, that usually settles without treatment.
- Build up of fluid in the lungs. You may need medication to treat this.
- Chest pain. This is treated with medications.
- Heart Attack.

Common risks and complications of the actual procedure include:
- Minor pain, bruising and/or infection from the IV cannula. This may require treatment with antibiotics.

Less common risks and complications of the actual procedure include:
- An allergy to injected drugs, requiring further treatment.

7. What are the safety issues when you leave the hospital?
Go to your nearest Emergency Department or GP if you become unwell.

Notes to talk to my doctor/health practitioner about:
1. What is a MRI contrast?

The medical imaging MRI procedure your doctor has asked you to have may use MRI Contrast. MRI Contrast is a colourless liquid that is injected into your blood stream. MRI Contrast is not a dye. It does not stain the inside of your body. It is used during MRI medical imaging procedures to allow your organs to be seen more clearly. Your doctor needs to use MRI Contrast to be able to get all the information needed to assist with your diagnosis.

This information sheet must be read together with the information sheet of the procedure you are booked for (if you do not have this information sheet please ask for one).

2. During the procedure

When the MRI Contrast is injected you should not feel any different.

3. After the procedure

MRI Contrast does not affect your ability to carry out normal activities; you should be able to continue with your day as normal.

4. Precautions

MRI Contrast is not suitable for some people; you will be asked a series of questions before it is given to you. Your answers allow staff to identify any risk factors that you may have.

- Please tell the staff if you are or suspect you might be pregnant or are breastfeeding.

Kidney function:

- MRI Contrast is removed from your blood by your kidneys through your urine. It is easily removed from the body of people who have normal kidney function.
- People whose kidneys are poorly functioning (known as ‘Renal Failure’) cannot remove MRI Contrast from their body. This may lead to a very rare disorder called Nephrogenic Systemic Fibrosis (NSF).
- NSF is a condition that results in scarring or thickening of the skin and tissues throughout the body. This scarring can lead to a tightening of muscle, tendons, ligaments, or skin that prevents normal movement and function. This condition is severely disabling and may result in death.
- You may be asked to have a simple blood test to find out the level of their kidney function.

5. What are the risks of MRI Contrast?

The risks and complications with MRI Contrast can include but are not limited to the following.

Common risks and complications include:
- No known common risks.
- Less common risks and complications include:
  - Injected Contrast may leak outside of the blood vessel, under the skin and into the tissue. This may require treatment. In very rare cases, further surgery could be required if the skin breaks down.
  - The injection may not be possible due to medical and/or technical reasons.
- Rare risks and complications include:
  - Allergic reactions occur within the first hour with most happening in the first 5 minutes.
  - The reactions vary from:
    - **Mild** – headache, brief nausea, dizziness, hives, rash and itching.
    - **Moderate** – wide spread hives, headaches, facial swelling, vomiting, shortness of breath.
    - **Severe** – Severe reactions are rare but include: life-threatening heart palpitations, very low blood pressure, throat swelling, fits and/or cardiac arrest.
    - Nephrogenic Systemic Fibrosis (NSF) for severe renal impaired patients only.
    - Death as a result of MRI contrast is very rare.

6. What are the safety issues when you leave the hospital?

Go to your nearest Emergency Department or GP if you become unwell.

Notes to talk to my doctor about:

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