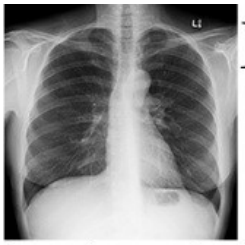

RURAL
MEDICAL
IMAGING

Locations: Innisfail Mareeba Atherton Ingham

Medication Management Policy and Procedures

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Medication Management Policy & Procedures

Purpose and Scope

The purpose of this policy is to ensure patients are administered the correct medication and to manage medication risks.

Medications utilised

The following medications are used Rural Medical Imaging

IV Contrast

- Omnipaque 350

Medication used as part of an interventional procedure

- Celestone Chronodose
- Bupivacaine

Emergency Medications

- Adrenaline

Storing, preparing and disposal of medication

Storage:

- Omnipaque 350 - stored away from radiation sources, in a low light area and below 30 degrees C
- Bupivacaine – store below 25 degrees C
- Celestone Chronodose - store 25 degrees C, protect ampules from light
- Phenergan - store in a cool, dry place away from light and between 20-25 degrees C
- Adrenaline - store in cool dry place under 25 degrees C

Preparation:

- Omnipaque 350 (CT Contrast)
  - Prior to it's use, should be warmed to a temperature of approx. 37.5 degrees C using the laboratory incubator. Omnipaque 350 should not be stored at this temperature for more than 30 days
  - Other preparation instructions outlined within the procedures in the "*Contrast Administration Protocol*"[i]

- Bupivacaine and Celestone Chronodose (US Guided Injections)
    - Before use, ampoules of Bupivacaine and Celestone Chronodose are checked by the sonographer or doctor to ensure medication and dosage is correct and that expiry dates have not been exceeded.
    - A mixture of Bupivacaine and Celestone Chronodose is drawn up in a syringe by the doctor performing the procedure.
    - Quantities of each substance for each injection is determined by the doctor and is reliant on the anatomy and site of concern that is under investigation.
    - Once the injection is complete, the doctor disposes of the syringe and any other contaminated goods in the designated yellow contaminated waste bin. Any used sharps are disposed of separately in the designated yellow sharps container.
    - A Guided Injection Worksheet is completed for each patient (attached). This worksheet contains the following information: The date of the injection, quantities of Bupivacaine and Celestone used, site of the injection, doctor and sonographer performing the injection. Once completed, this worksheet is added to the patient's file by scanning into the RIS system.
- All Medications are checked once a month, to ensure they are being stored correctly and that expiry dates are valid.

Disposal:

- Omnipaque 350
    - Unused, residual quantities to be disposed of in designated clinical waste bins.
    - Expired stock dispose down sink.
- Bupivacaine
    - Unused, residual quantities to be disposed of in designated clinical waste bins.
    - Expired stock to be handed to nearest pharmacy for appropriate disposal.
- Celestone Chronodose
    - Unused, residual quantities to be disposed of in designated clinical waste bins.
    - Expired stock to be handed to nearest pharmacy for appropriate disposal.
- Adrenaline
    - Unused, residual quantities to be disposed of in designated clinical waste bins.
    - Expired stock to be handed to nearest pharmacy for appropriate disposal.
- Clinical Waste Bins are emptied when full, and sealed clinical wasted bags placed in to the large, locked clinical waste wheelie bin.
- Sharps containers, once full, are sealed and then placed in the large, locked clinical waste wheelie bin
- Large, locked Clinical Waste wheelie bins are emptied every 6 months by J.J. Richards Waste. If bins require emptying withing the 6 month schedule, Imaging technicians are to contact J.J. Richards to collect.

Identifying at risk patients

Patients receiving any type of interventional medication are advised of what is involved with the procedure and are required to sign a consent form in accordance with our "Diagnostic Consent Policy & Procedures" (Refer document "2.2 Diagnostic Consent Policy & Procedures") The consent form will be either a "Consent Form CT with Contrast" or "Consent Form Guided Injection" as contained in the aforementioned document.

Based on the answers provided to the technician the patient may be advised to follow further procedures and will be required to sign an acknowledgment of that instruction. For example a diabetic patient may be instructed to not take their Metformin for 48 hours after having a procedure with contrast. See attachment Diabetic Medication after Contrast Form [ii]

The consent forms allow patients to inform staff if they have any known allergies to the medications being used for their procedure.

Administering Medications

Before administering medications the patient is identified and cross checked to the procedure as set out in the Patient Identification Policy and Procedures.

The protocol for administering contrast is contained in document *"Contrast Administration Protocol.doc"*[iii]. See external document "2.4.1 Contrast Administation Protocol"
The protocol for administering Bupivacaine and Celestone via US guidance is contained in document "US Guided Injection Protocol"[iv]. See external document "2.4.2 Guided Injection Protocol"

Our "Contrast Administration Protocol" and "US Guided Injection Protocol" are designed to ensure that best practices and effective risk management are adhered too. The Protocols covers:

- Identification of at risk patients
- Advising patients of risk
- Obtaining consent
- Confirming dosages
- Procedures and processes to be followed when administering medications
- Monitoring the patient during and after the administration of medications
- Recognising reactions

- Treating adverse reactions
- Location of resuscitation equipment

Monitoring and recording side effects

After the administering of any medication the patient is observed as per our protocols and if there is any type of adverse reaction the treatment must be recorded on our Treatment Record Sheet [v]

The treatment record is scanned into the RIS and recorded against the patient and the procedure.

Should the patient require medical attention the Transfer of Care procedures will be followed as contained in our "Patient Matching Policy & Procedure"[vi] see excerpt from aforementioned policy Transfer of Care

Managing adverse reactions

Should an adverse reaction occur our diagnostic imaging staff are trained to provide a first line response. A second staff member is to call for emergency assistance from the doctors and/or call '000' immediately.

The resuscitation trolley is located within the adjacent doctors surgery.

The equipment includes:

- Oxygen / Suction
- Stethoscope
- Sphygmomanometer
- Amby bag and intubation equipment
- Pulse oximeter

The Anaphylaxis response kit is located in the CT room.
Emergency drugs in this kit include:

- Adrenaline
- Normal saline

A list of CPR trained personnel is kept with the resuscitation units in each site and in the CPR Training Record as contained in the Safety and Quality Manual.
A stocktake of the Resuscitation trolley and anaphylaxis response kit is done monthly.

Reporting, Investigating & responding to Adverse or Mismanaged Events

All adverse events are to be reported immediately to the Managing Director or Chief Radiographer, followed by entering the event in the Quality Improvement Register and completing an incident report.
Incidents are to be recorded in the Quality Improvement Register (Attachment 2)
An incident report form is required to be filled out and submitted to management. See Attachment Incident Report Form

The Managing Director and or Chief Radiographer will conduct an investigation into the event to determine what happened, how it happened, why it happened and how it could have been avoided or done differently. The response to the event will also be investigated to ensure that appropriate measures and responses were undertaken during the event. A debrief session will be conducted if necessary in accordance with the Debrief Guide in the Safety Quality Manual. The outcome to be recorded and after de-identification used for training purposes.

Sample records

A sample of de-identified record for CT with IV contrast and Ultrasound injection consent form is attached. Refer to Sample records, which show the information collected about the patient's medication use and/or history regarding previous reactions to medications.

Example of records demonstrating managing adverse reactions at the time they occur will be added to this document should we experience an adverse reaction

Document review

This document has been compiled and reviewed in August 2021 whilst reviewing and updating our Safety and Quality Manual and will be reviewed again July 2024 as per Review Schedule in Safety & Quality Manual.

INCIDENT REPORT FORM

RURAL MEDICAL IMAGING
Locations: Innisfail Mareeba Atherton Ingham

To be completed in the event of a worker witnessing/being involved in any incident involving a patient.

Personal details of patient

Surname:	First name(s):	DOB:
Male Female		
Address:		
Telephone number		
Email address:		

Incident details *(completed by person involved)*

Date of incident:	Time of incident:
Where did the incident occur:	
Staff Member name and positon involved in the incident:	
Description of incident: *(in your own words, what happened?)*	

Was first aid or further treatment required? **Yes** **No**

Treatment given if any:

Name of witnesses to the incident

Name:	Contact:
Name:	Contact:

Was the incident a result of a workplace hazard **Yes** **No**

Description of hazard:

Proposed Action/Action taken:

Any further notes or comments

Signature of manager/supervisor

Signature

Date:

Further investigation

Does incident require further investigation?

Attachment 2 – Quality Improvement Register

Improvement Action Item (include description of event/issue leading to the identification of improvement area)	Source (eg. Patient, Referrer, etc)	Action Undertaken	Person Responsible for Agreed Action	Completion Date

Diabetic Medication after Contrast Form

RURAL MEDICAL IMAGING
Locations: Innisfail Mareeba Atherton Ingham

Date_____

Dear _____

Do not take your Metformin Based Diabetic Medication for the next 48 hours; unless instructed by your Doctor.

Your Doctor may or may not want to monitor your kidney function during this time.

However it is important that you monitor your blood sugars regularly and if your levels are out of balance, seek medical attention immediately.

You must drink 3.5 litres of water each day for the next 2 days.

Please show this letter to your Doctor for further advice and clarification after this examination.

Resume your Diabetic Medication after

Time:_____ Date:_____

I _____have read and understood the above information
(Patient name)

Signature:_____ Date:_____

Treatment record form

RURAL MEDICAL IMAGING

Ph: 07 40617006

Patients Name:_____ **Age:**_____ **D.O.B:**____/____/____

Allergies:_____

Reason for CT:_____

Time of Incident:_____ **QAS Notified:**_____

Treatment Record:

Drug Given:_____ **Time Given:**_____

Drug Given:_____ **Time Given:**_____

Drug Given:_____ **Time Given:**_____

Drug Given:_____ **Time Given:**_____

Drug Given:_____ **Time Given:**_____

Drug Given:_____ **Time Given:**_____

Progress Notes:

Transfer of care

Transfer of care

In the event of a clinical incident i.e. adverse reaction to a contrast, the technical staff will be responsible of taking care of the patient.

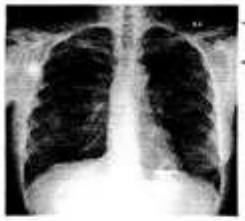
The technician will notify reception of the incident and the extent of the medical assistance required, and will remain with the patient administering first aid as necessary.

Reception will arrange medical assistance or ambulance as directed and provide assistance as required.

The technician will provide to the GP or ambulance officer patients name, identifiers and a brief of the incident.

Our responsibility extends until the conclusion of the emergency care process or until transferred to a GP or Ambulance officer.

Sample Records



RURAL MEDICAL IMAGING

PATIENT CONSENT FORM - CT SCAN WITH IV CONTRAST INJECTION

As part of this CT Scan, it may be necessary for you to have an injection of an X-ray dye, known as a Contrast Injection. This allows for better visualization of your Anatomy and, in turn, will lead to the best possible diagnosis.
If you have a Contrast Injection, you are likely to experience the sensation of a Hot Flush as well as a Metallic taste or smell in your throat. These are **Normal** sensations that most people will have, and they do not last long.
As with most medications, it is possible that you could have an allergic reaction with this Contrast Injection. Allergic reactions are uncommon, but Mild and Severe reactions are possible. Examples of these types of reactions include:

- Mild Reactions (Rare) include: Nausea/Vomiting, Itchy Skin/Hives, Dizziness, Minor Swelling of the face/neck, Headache.
- Severe Reactions (Extremely Rare) include: hypovolaemic shock, respiratory arrest, cardiac arrest and convulsions.

Patients with impaired Renal/Kidney function may have an increased risk of Acute Kidney Injury (AKI) as a result of intravenous contrast media.
If you have any questions or concerns about this procedure, please ask our staff after completing the following questions.
Please indicate whether any of the following apply to you (to the best of your knowledge):

	YES	NO
• Asthma	○	⊘
• Hepatitis	○	⊘
• HIV/AIDS	○	⊘
• Myasthenia Gravis	○	⊘
• Pheochromcytoma	○	⊘
• Kidney Failure / Removal / Transplant	○	⊘
• Suffering Dehydration	○	⊘
• Undergoing Radioactive Iodine Treatment	○	⊘
• On Thyroid Medication	○	⊘
• Pregnant	○	⊘
• Diabetes	○	⊘
Have you ever had a CT Scan with Contrast?	⊘ YES	○ NO
If YES, did you suffer any allergic reaction?	○ YES	⊘ NO

IV CONTRAST GIVEN
Creat: 104 eGFR: 43
Date Taken: 13 09 2021
Vol (mL): 65
Complications: NIL
Initials: OS AN

Lot: 15501455

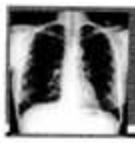
Please list any other allergies you may have:

.....

⊘ **I DO CONSENT** to having an IV Contrast Injection if it is deemed necessary for my CT Scan.

○ **I DO NOT CONSENT** to having an IV Contrast Injection as part of my CT Scan.

Name: [redacted] Signature: [redacted] Date: 16/09/21



RURAL MEDICAL IMAGING

Rural Medical Imaging INNISFAIL
MR LEONARD CHARMAN
Visit:9079973 DOB:27/10/1952
16/09/2021 US INJECTION RIGHT S
Medicare: 4103272657- 1

Interventional Procedures – Consent Form

I have been referred by my doctor to undergo:

☑ Ultrasound Guided Joint Injection ☐ Ultrasound Guided Biopsy / Fine Needle Aspiration

The procedure indicated above is to be performed on ..... SHOULDER .....
(indicate body area, example: Rt Shoulder, L3/L4 Facet Jt.)

I acknowledge that I have been given the following information sheet/s which relate to my procedure:

☑ US1 - Ultrasound Guided Joint Injection ☐ US2 - Ultrasound Guided Biopsy / Fine Needle Aspiration

I have read the information sheet/s indicated above and I understand:

- The risks and complications involved with this procedure, in particular, those that are specific to me.
- The medications being used in this procedure.
- Despite being performed with absolute due professional care, RMI cannot guarantee that this procedure will improve my condition.
- The health professional/s performing the procedure may be undergoing further training.
- I have the right to change my mind at any time, even after I have signed this consent form.
- The images recorded during the procedure will assist the doctor/health professional to perform the procedure and provide any appropriate treatment, if necessary.

I acknowledge that I have been given the opportunity to ask questions and raise concerns with the doctor/health professional about this procedure and its associated risks/complications. I also acknowledge that my questions and concerns have been answered to my satisfaction.

Please indicate if you are allergic to the following medications:

☐ Anaesthetic If YES, please specify.....

☐ Steroids if YES, please specify.....

Based on the above statements;

I do consent to undergo this procedure.

Name.....[redacted].....

Signature.....

Date..16/9/2021

Original Files

[i] 2.4 Contrast Administration Protocol
[ii] 2.4 Diabetic Medication after Contrast Form
[iii] 2.4 Contrast Administration Protocol
[iv] 2.4 US Guided Injection Protocol
[v] 2.4 Treatment record form
[vi] 2.3 Patient Matching Policy and Procedure