



RURAL MEDICAL IMAGING

Locations: Innisfail Mareeba Atherton Ingham

Contrast Administration Protocol

Table of Contents

Administration of Contrast Protocol.....	3
Purpose and Scope	3
Guidelines	3
Procedure	4
Documentation requirements	5
Document review	6

Contrast Administration Protocol

Purpose and Scope

The purpose of this protocol is to ensure best practice and effective risk management in the administration of intra-vascular contrast media.

Guidelines

Any examination requiring the administration of contrast media involves the risk of an adverse reaction. Patient safety will be maintained through the identification and management of risk factors prior to the administration of contrast media.

Risk factors include: age, renal impairment, diabetes and previous reaction to contrast. These shall be indicated on the medical imaging request form.

If the patient meets any of the following criteria, a recent (less than one month) eGFR is indicated:

- Over 70 years of age
- Renal impairment
- Diabetes
- On metformin

Patients identified as having renal impairment are required to provide written consent in accordance with our Diagnostic Consent Policy and Procedures. A clinical decision to postpone or not perform the procedure should be documented in the patient's medical record.

The Radiographer has the responsibility for contrast administration from receipt of the referral for imaging until the outcomes are communicated to the referring medical officer. This includes:

- Ensuring that risk factors are identified and managed
- Ensuring the patient is informed of the risks associated with the procedure and confirming just prior to administering the contrast they understand the risk factors
- Obtaining documented consent where indicated

- Confirming the type, volume and strength of the contrast being administered is consistent with the dosages contained with those contained in the “*Protocols CT and Xray*” document.
- Follow the procedures below for peripheral intravenous cannulation and injection of contrast.
- A medical officer (doctor) shall be readily available to attend the patient in the event of an emergency. Written protocols are followed indicating the dose and type of contrast to be administered and when further medical consultation is required in accordance with specifications contained in “*Protocols CT and Xray.doc*”

Procedure

All injections of contrast will be flushed pre and post administration with 0.9% sodium chloride unless specifically excluded by a radiologist or medical officer.

The following process shall be followed:

- correctly identify the patient as per the correct patient, correct procedure, correct side and side policy (3C’s)
- ensure that patients with risk factors have been correctly identified and appropriately managed and consent obtained where applicable
- ensure when administering IV contrast that a Medical Officer is immediately available to attend to the patient in the event of an emergency or complication of contrast injection
- confirm that the type, volume and strength of contrast being administered is consistent with the protocol.
- check the expiry date on the IV contrast and 0.9% Sodium Chloride flush labels prior to administration
- fill and label syringes with the type (contrast name or Sodium chloride), volume and strength. Manufacturer provided labels detailing this information are acceptable.
- ensure labels are clearly visible and placed immediately on the syringe by the medical imaging staff member who filled the syringe.
- follow guidelines and protocols on the appropriate IV access for contrast administration
- ensure IV access, equipment and flow rates are appropriate, and that all lines are free of air

- actively monitor the patient and cease the injection in the event of an adverse reaction or extravasation and seek medical assistance
- ensure patients are not left alone or unsupervised for the first 10mins post injection. It is advisable that the patient remain for at least 15 mins post-contrast. This shall be increased to 30 mins in patients at increased risk of contrast reactions.
- appropriately dispose of all used/filled syringes at the completion of the examination

Medical imaging staff administering contrast shall be trained and competent in:

- The recognition of contrast reactions
- The procedures for treating adverse reactions
- Cardiopulmonary Resuscitation (CPR) or Basic Life Support (BLS) – annual competencies required
- Use of equipment, e.g. pressure injector

Resuscitation equipment and medication for the treatment of complications shall be immediately available. Resuscitation trolley is located in the CT scan room near the entry door.

Documentation requirements

Recording of this information shall occur on either the medical imaging request form, or patient worksheet and stored as a permanent record. The following information is recorded

- type of IV access (injection site and lumen size)
- name of medical imaging staff who cannulated the patient
- contrast type, volume, strength and batch number
- name of medical imaging staff who administered the contrast

In the event of an adverse reaction or extravasation of contrast requiring medical intervention, a Treatment Record Sheet will be completed, scanned and entered against the patient in our RIS. The event is recorded in the Quality Improvement Register and complete an incident report completed.

Local contrast protocols shall be reviewed annually and as required and will be reviewed by Chief Radiographer.

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.

References:

https://www.health.qld.gov.au/_data/assets/pdf_file/0026/147563/qh-gdl-016.pdf