TRUST POLICY

PROTOCOL FOR THE ADMINISTRATION OF AMIODARONE

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All documents must be reviewed by the last day of the month shown under “review date”, or before this if changes occur in the meantime.

DOCUMENT OVERVIEW:

- Oral amiodarone loading dose regimen
- Administration of intravenous amiodarone
- Monitoring for amiodarone-induced extravasation
- Treatment of amiodarone-induced extravasation

This document may be made available to the public and persons outside of the Trust as part of the Trust’s compliance with the Freedom of Information Act 2000
1. **INTRODUCTION**

The pharmacokinetics of amiodarone are unusual and complex. A loading dose is required when initiating treatment. This may be given orally or intravenously depending on the clinical situation.

2. **ORAL ADMINISTRATION**

Oral administration should be used wherever possible. 10-15g of amiodarone is required to load a patient. Oral loading should be prescribed according to one of the following schedules depending on clinical urgency and risk of bradycardia:

- **Standard oral loading:**
  - Amiodarone 200mg tds for 7 days, then:
  - Amiodarone 200mg bd for 7 days, then:
  - Amiodarone 200mg od thereafter (maintenance dose)

- **Rapid oral loading:**
  - Amiodarone 400mg tds for 7 days, then:
  - Amiodarone 200mg od thereafter (maintenance dose)

When prescribing an oral amiodarone loading dose, the words 'loading dose' must be included in the additional instructions/indication section of the drug chart.

3. **INTRAVENOUS ADMINISTRATION**

For GHNHSFT i.v. drug administration guide [click here](#).

There have been adverse clinical incidents within the Trust where extravasation of amiodarone has caused significant tissue damage. Therefore, amiodarone should only be administered intravenously when a rapid response is required (or where oral administration is not possible) and must be administered via a central line. The only exception to this is the treatment of cardiac arrest; in this situation amiodarone may be administered peripherally with extreme care to avoid extravasation.

Amiodarone injection is acidic (pH 3.5-4.5). Intravenous administration can commonly cause reactions at the injection site, particularly when administered peripherally. Injection site reactions include: pain, erythema, oedema, necrosis, extravasation, infiltration, inflammation, induration, thrombophlebitis, phlebitis, cellulitis, infection, pigmentation changes.

Extravasation can lead to tissue damage including necrosis. Asymptomatic blue-grey discoloration on exposed areas can also occur.

If there is absolutely no alternative to peripheral administration and rapid oral loading is not appropriate, amiodarone should be administered via a 20 gauge cannula in the antecubital fossa. Use of a smaller cannula in a larger vein allows greater haemodilution of substances as they are administered intravenously. However, care should be taken in this situation, as the injection site is in an area of flexion and so not an ideal point of access. It may make extravasation difficult to detect, so the injection site must be regularly monitored (see section 3.1).
3.1 How to Recognise Extravasation

- Pain at the intravenous site may be modest or severe, usually burning or stinging. There may be erythema, swelling and tenderness, and lack of blood return from the cannula. Not all of these symptoms may be present.
- Local blistering is indicative of at least a partial-thickness skin injury. There may also be mottling and darkening of the skin, persistent pain, and firm induration.
- Early firm induration, with or without tenderness, has been shown to be a reliable sign of eventual ulceration.
- When the full thickness of the skin is damaged, the surface may appear very white and cold with no capillary filling, and later may develop a dry, black eschar.
- Ulceration is not usually evident until one or two weeks after the injury when the eschar sloughs to reveal the underlying ulcer cavity. Ulcers have a typical necrotic, yellowish fibrotic base with a surrounding rim of persistent erythema.

3.2 What if Extravasation Occurs, or is Suspected?

There is no specific treatment for amiodarone-induced extravasation.\(^1,3\)

- If extravasation is suspected, administration of amiodarone should be stopped immediately.
- Aspirate as much of the drug from the tissue as possible
- Remove cannula
- Mark the affected area with a pen (to monitor progress of treatment)
- Elevate the affected limb
- Apply cold compresses to limit spread of the drug into tissue
- Give pain relief as appropriate
- Involve tissue viability nurse in care of the injury as soon as possible

3.3 Documentation

All information related to amiodarone-induced extravasation, including any treatment given, should be documented in the patient's medical notes, and on a Trust Clinical Incident form.

4. REFERENCES

2. Personal Communication Medicines Information Department GRH, November 2003
## DOCUMENT PROFILE

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<td>Name</td>
</tr>
<tr>
<td>AUTHOR</td>
<td>Nick Butler / Marcus Jones</td>
</tr>
<tr>
<td>ISSUE DATE</td>
<td>November 2011</td>
</tr>
<tr>
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</tr>
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Gloucestershire Hospitals
NHS Foundation Trust

EQUALITY IMPACT ASSESSMENT

INITIAL SCREENING

1. Lead Name:
   Job Title:

2. Is this a new or existing policy, service strategy, procedure or function?
   New X  Existing

3. Who is the policy/service strategy, procedure or function aimed at?
   Patients Carers Staff X Visitors
   Any other Please specify:

4. Are any of the following groups adversely affected by this policy:
   If yes is this high, medium or low impact (see attached notes):
   Disabled people: No X Yes
   Race, ethnicity & nationality: No X Yes
   Male/Female/transgender: No X Yes
   Age, young or older people: No X Yes
   Sexual orientation: No X Yes
   Religion, belief & faith: No X Yes

   If the answer is yes to any of these proceed to full assessment.
   If the answer is no to all categories, the assessment is now complete.

Date of assessment: 22/11/2011  Completed by: Marcus Jones
Signature:  Job title: Pharmacist
Director:  Signature:

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