Patient Name:
Address:
DOB:
NHS No:
GP:

Berkshire West NHS Primary Care Trust
Sue Ryder Care Nettlebed Hospice
Royal Berkshire NHS NHS Foundation Trust

METHADONE for refractory pain:
SHARED CARE PROTOCOL

(this protocol *does not* describe the use of methadone in substance misuse – see separate guidance)

Produced by: Paul Howard, Consultant in Palliative Medicine
Authorised by: Berkshire West CHQPSG
Date: May 2010
Review date: May 2013

This shared care protocol is produced to support the combination of the best of both primary and secondary care for the benefit of the patient. It supports, but does not replace, discussion and agreement on an individual patient basis about transfer of care. Agreement by the GP should be confirmed (verbal or written) before transfer of care.

Responsibilities for care and clinical monitoring

Consultant responsibilities

Initiation	• Initial assessment of appropriateness of methadone • Informed consent to start methadone and baseline observations and tests • Initial dose titration, including adjusting concurrent analgesia as needed
Prescribing	• Prescription of methadone during initial dose titration • Prescription of further 14 days of methadone once stable dose achieved and shared care agreed
Monitoring	• To arrange a named pain or palliative care team member (physician or nurse specialist) to monitor efficacy, tolerability and adjust dose where required • To arrange additional timely re-assessment if the GP raises concern
Communication	• To discuss shared care arrangement with GP and send a copy of this document (including completed clinical summary page) to GP • To inform GP of outcome of re-assessments • To provide 24hr advice (via on-call palliative care consultant or anaesthetist as appropriate)

General Practitioner responsibilities

Initiation	• None
Prescribing	• Prescription of methadone once the patient is established on an effective dose and shared care has been agreed (the back page 'pharmacist information' can be torn off and sent with the FP10)

Monitoring	• For adverse effects (similar to morphine, but accumulation can cause delayed onset sedation/toxicity in patients established on a stable dose)
	• For drug interactions with methadone:
	  • ↑Methadone toxicity with enzyme inhibitors e.g. azole antifungals: (fluconazole is least problematic, or use nystatin), ciprofloxacin, cimetidine, SSRIs; quinidine and grapefruit juice (↑absorption)
	  • ↓effect with enzyme inducers (e.g. carbamazepine, phenytoin, , rifampicin, St John's wort, some anti-retrovirals) – use alternatives or monitor for ↓effect
	  • Additive QT prolongation with other QT prolongers
	  • MAOI (monoamine oxidase inhibitors): methadone is an SSRI - avoid

Communication	• To inform specialist of concerns about inadequate pain control or adverse effects

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Summary of the clinical condition

(The specialist completes the summary section below, including advice for a particular patient that differs to the standard shared care arrangements. Copies of the entire shared care document, including this summary, are kept in the clinical notes, sent to the GP and offered to the patient)

- **Diagnosis**
    - Underlying disease:
    - Pain mechanism (e.g. neuropathic pain):
- **Current regimen**
    - Dose:
    - Frequency:
    - Route:
    - Formulation and strength of preparation (**beware of confusion between different strength preparations**):
    - Date initiated:
    - Date current regimen reached:
- **Relevant co-morbidities, abnormal baseline observations or tests, or other factors relevant to the use of methadone**:

When GP could assume responsibility

- The patient has been initiated on the treatment by a consultant in pain or palliative medicine and it is considered clinically appropriate to transfer care.

AND

- shared care has been agreed in accordance with these guidelines between the consultant and the GP

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Appendix 1. Pharmacology, background information, common problems

Obtaining supplies in the community

Methadone is a Schedule 2 Controlled Drug. It is prescribed on an FP10 in the same way as other controlled drugs – ***the restrictions and prescription forms relevant to use in addiction do not apply***. Send the back page tear-off pharmacist information sheet with the FP10 to avoid confusion.

Indication

Methadone is used for pain refractory to usual measures (e.g. opioids combined with anti-epileptics and tricyclic antidepressants). Like ketamine, it reduces the hyperexcitability (central sensitisation) sometimes responsible for refractory pain by blocking NMDA-glutamate receptors. It is used instead of, or in combination with, ketamine where the latter is insufficient or its use precluded. Methadone is widely prescribed by Specialist Palliative Care and Pain teams in Great Britain - further information may be obtained from:

- The pain or palliative care team
- Palliative Care Formulary 3rd Edition. Twycross *et al* 2007, Radcliffe Medical Press
- www.palliativedrugs.com (registration for access is free for health professionals)

Licensing status and Use by Non-Specialists

Methadone is licensed for use in severe pain. However, it is an amber drug (for initiation by specialists) due to difficulties with dose titration and accumulation.

One of three preparations is used, depending on the route:

- **Oral solution (10mg/ml):** although several strengths of oral solution are available, only Methadose 10mg/ml is used (from Rosemont Pharmaceuticals, tel: 0113 2441999 Fax: 0113 2460738) to avoid potential risks of strength confusion
- **Oral tablets (5mg)**
- **Subcutaneous:** Methadone for injection (10mg/ml) in 1ml, 2ml or 5ml ampoule sizes

Dose and administration

There is no straightforward conversion ratio between methadone and other opioids such as morphine. Accumulation can result in a delayed onset of toxicity. Thus dose titration is extremely difficult and usually undertaken in an inpatient setting where both nursing and medical staff are experienced in its use.

Oral to subcutaneous conversion

Temporary or permanent loss of oral route (e.g. vomiting or end of life care)

Discuss with the pain or palliative care consultant. If required, subcutaneous methadone is given:

- via 24 hour subcutaneous syringe driver
- At a dose **half** that of the previous 24 hour oral dose:
  - E.g. methadone 20mg b.d. PO would be equivalent to 20mg over 24hrs via syringe driver
  - There is limited data on combining methadone with other drugs in syringe drivers: discuss with the pain or palliative care team
  - Water or sodium chloride 0.9% can be used as a diluent

Adverse effects

Methadone's adverse effects are generally similar to morphine and other strong opioids. The important differences are:

- **Accumulation resulting in delayed toxicity (e.g. respiratory depression)**. This can occur despite well tolerated stable doses for days or weeks
- **Drug interactions resulting in unexpected toxicity**. Important examples are listed on page 1
- **Arrhythmias due to QT prolongation**. Case reports include fatal arrhythmias but mainly involve people treated for opioid addiction (dose regimens differ). The clinical significance in pain medicine is unclear but pre- and post-methadone initiation ECG monitoring can be used in patients at particular cardiovascular risk.

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NHS
Berkshire West
Palliative Care Directorate

Appendix 3. Pharmacist information

(please detach this page and ask the patient to take it along with the FP10 to their community pharmacist)

Dear pharmacist,

This patient is receiving methadone for refractory pain. This has been initiated by a specialist in pain or palliative medicine. Please find information below to facilitate its supply.

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