GUIDELINE FOR PARACETAMOL USE

<table>
<thead>
<tr>
<th>Approval Committee</th>
<th>Version</th>
<th>Issue Date</th>
<th>Review Date</th>
<th>Document Author(s)</th>
</tr>
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</table>
| Drug & Therapeutics Committee, MGC | 1       | February 2012 | February 2014 | Dr J Cranshaw
|                     |         |              |             | Dr S McCabe
|                     |         |              |             | Laura Granger |

Version Control

<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Author</th>
<th>Section</th>
<th>Principle Amendment Changes</th>
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Guideline for Paracetamol Use
Version 1
Page 1 of 5
February, 2012
Introduction

Paracetamol has been used extensively at the RBH. The WHO recommends regular oral paracetamol as first line therapy for all pain. It is virtually free of side-effects in recommended doses. Contra-indications and adverse drug interactions are rare. The only clear contra-indication is severe liver insufficiency.

*Intravenous* paracetamol should be used with more caution. **The risks of toxicity in patients < 50 kg and harmful administration errors are higher.** Dosing restrictions and prescribing advice are detailed below. It is licensed **only** for short-term treatment of moderate pain. Change the route to oral as soon as possible.

Advantages of Paracetamol

1. It relieves many kinds of mild to moderate pain including post-operative, musculoskeletal and traumatic pain and headache.
2. It has a synergetic effect with other analgesics, especially codeine and NSAIDs, resulting in better overall pain control.
3. It has an opioid sparing effect. Thus it may reduce respiratory depression, sedation, confusion, nausea and constipation caused by opioids.
4. It can generally be taken by people who are ‘sensitive’ (peptic ulcers, asthma, chronic renal failure and acute kidney injury) to aspirin or other NSAIDs.
5. It is sometimes effective in reducing fever. However the benefits to the patient of temperature reduction should be clear.

**NB** Paracetamol should not normally be required for post-operative pain relief if the patient has an effective epidural or spinal. However if the spinal or epidural is suspected to be inadequate or there is a site of pain outside the field of neuraxial analgesia then paracetamol should be offered.

Routes of Administration of Paracetamol

**Oral**
- This route should be the first choice for all patients.
- 1 gram may be given every 4 hours with a maximum of 4 doses in 24 hours.
- Consider a reduced dose of 500mg in frail older patients.
- If there are difficulties with swallowing or there is a feeding tube *in situ*, consider soluble tablets or suspension.

- **Perioperative Period:** The oral route is first-line.
- A single pre-operative dose should be administered 30 minutes prior to surgery as part of anaesthetic premedication. The dose should be determined by the patient’s weight and prescribed / administered by an anaesthetist or nurse in the Sandbourne Suite or Short Stay Unit (**RBCH PGD 1**).
### Patient Weight Pre-operative Dose

<table>
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<tr>
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<tbody>
<tr>
<td>40 to 60 kg</td>
<td>1g</td>
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<tr>
<td>60 to 80 kg</td>
<td>1.5g</td>
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<td>&gt; 80kg</td>
<td>2g</td>
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Patients can be prescribed regular or when required paracetamol post-op, so may be given up to 3 further 1g doses of paracetamol in the next 24 hours. This means the highest dose given in 24 hours will be 5g, but this will equate to a maximum of 62.5mg/Kg in 24 hours.

### Intravenous

- This should only be used if the oral and rectal routes are inappropriate.
- IV administration is suitable in patients who are
  - absolutely nil by mouth (see below NB)
  - nauseated or vomiting
  - at risk of aspiration
- **NB:** Routine ‘nil by mouth’ pre-operative instructions do NOT include omitting prescribed pre-medications including oral paracetamol.
- It should be prescribed for a **maximum of 48 hours at a time.** Patients should be reviewed regularly and switched to oral paracetamol when possible. A clear decision to continue the IV route should be made every 48 hours. The prescription should be rewritten.
- **Critical Care:** Patients may be prescribed IV / enteral paracetamol to be determined and documented by the administering nurse; the enteral route must be used first-line. Patients requiring IV paracetamol when discharged from the unit must have a specific 48 hour prescription for the IV route.
- **Intra-operatively:** IV paracetamol may be used as opioid sparing but oral premedication is preferable.
- **Recovery:** IV paracetamol can be given to sleepy patients but the nurse must ensure that the patient has not had paracetamol within the last 4 hours (or 6 hrs if the patient has renal failure – CrCl < 30 ml/min).

### Dosing restrictions of IV paracetamol

The maximum daily dose of IV paracetamol must not exceed **3g in 24 hours** in:

- Patients < 50 kg (only use doses of 15 mg/kg)
- Patients with CrCl < 30 ml/min (interval must also be > 6 hrs)
- Liver impairment (do not use in severe insufficiency)
- Chronic alcoholism
- Chronic malnutrition
- Hypotension

Also beware of increased risks of hepatic and renal toxicity in patients taking
- Carbamazapine
- Phenytoin
- Rifampicin
- St Johns Wort

Monitor renal and hepatic function during use. Consider adverse paracetamol effects.
Rectal
Rectal administration may be appropriate if the oral route is contra-indicated and if the patient does not have IV access. However,
- It is less efficacious than oral
- The absorption is slower and less reliable
- The onset is slower (2 to 3 hours) and the duration of action is shorter
- There are several contra-indications:
  1. Colostomy / ileostomy
  2. Low rectal anastomosis
  3. Radical prostatectomy
  4. Patients who are difficult or who should not be be rolled post-op
  5. Diarrhoea or constipation
  6. Patients who refuse the rectal route

Consultation Process

<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Author</th>
<th>Level of Consultation</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>2011</td>
<td>Dr J Cranshaw Dr S McCabe Laura Granger</td>
<td>Analgesia Review Group</td>
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**1. Title of document/service for assessment**
Guidelines for Paracetamol Use

**2. Date of assessment**
February 2012

**3. Date for review**
February 2014

**4. Directorate/Service**
Trust-wide

**5. Approval Committee**
MGC

<table>
<thead>
<tr>
<th>Yes/No</th>
<th>Rationale</th>
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<tr>
<td>6. Does the document/service affect one group less or more favourably than another on the basis of:</td>
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<td>• Race</td>
<td>No</td>
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<td>• Gender (including transgender)</td>
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<td>• Religion or belief</td>
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<td>• Age</td>
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<td>• Disability – learning disabilities, physical disabilities, sensory impairment and mental health issues</td>
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<td>• Marriage and Civil Partnership</td>
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<td>• Pregnancy and Maternity</td>
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| 7. Does this document affect an individual's human rights? | No |
| 8. If you have identified potential discrimination, are the exceptions valid, legal and/or justified? | N/A |

9. If the answers to any of the above questions is ‘yes’ then:

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<td>Demonstrate that such a disadvantage or advantage can be justified or is valid</td>
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<td>Adjust the policy to remove disadvantage identified or better promote equality</td>
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<td>If neither of the above possible, submit to Diversity Committee for review.</td>
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10. Screener(s)

**Print name:** Jacqui Bowden

11. Date Policy approved by Committee

| 2 February 2012 |
| 2 February 2012 |

12. Upon completion of the screening and approval by Committee, this document should be uploaded to papertrail.