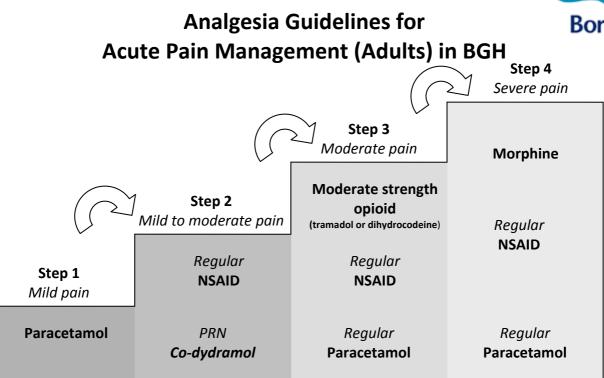


Title	Analgesia Guidelines for Acute Pain Management (Adults) in BGH	
Document Type	Clinical guideline	
Issue no	Clinical Governance Support Team Use	
Issue date	April 2013	
Review date	April 2015	
Distribution	NHS Borders clinical staff	
Prepared by	BJF Acute Pain Team Formulary Group	
Developed by	Acute Pain Team	
Equality & Diversity Impact Assessed		
Approved By		





The analgesic ladder above is intended as a guide. Individual patients may occasionally have requirements that will need special consideration (e.g. patients with chronic pain or those on long term opioid treatment, those on partial opioid agonists eg. buprenorphine or opioid antagonists eg. naltrexone). The Acute Pain Team can be contacted in Recovery Room, ext 26596 (or via the Duty Anaesthetist out of hours, bleep 3933).

General principles

- Drug dose and duration will depend on severity of pain
- For predictable pain, prescribe a regular prescription of analgesics with additional breakthrough analgesia available
- Analgesia should be reviewed every 24 hours and always prior to discharge from hospital
- Oral route is preferred to parenteral route. Use parenteral routes if patient is unable to absorb from gastrointestinal tract, but remember to switch to oral route when patient's GI function has returned to normal
- Rectal preparations are available for paracetamol and diclofenac consider risks and benefits prior to using in specific groups e.g. previous rectal/ abdominal surgery
- Prescribe a laxative with all opioid prescriptions, including moderate strength opioids
- Currently the use of oxycodone and COX II inhibitors are for Specialist initiation only (Anaesthesia/Acute Pain Service/Outreach Service).

MILD PAIN

• **Paracetamol** 1g orally or IV 6 hourly regularly or PRN (maximum 4g/24 hours)

Do not prescribe this in conjunction with Codydramol or other paracetamol-containing compound preparations. Due to the considerably greater costs, paracetamol IV should be reserved for those patients unable to take by oral route. The oral route should be used where possible. Care should be taken not to exceed 60mg/kg/day, and extra caution should be exercised in those of low body weight

or with low glutathione stores (poor/little diet). Rectal paracetamol is more expensive than the IV preparation, and bioavailability is highly variable.

MILD TO MODERATE PAIN

 Ibuprofen 	600mg orally tds	(maximum 2400mg/24hours)
or		
 Diclofenac 	50mg PR every 8hrs	(maximum 150mg/24 hours)
	This should be reserved for patients with no oral intake.	

NSAIDs should be prescribed on a regular (not PRN) basis for maximum benefit. The prescription should be reviewed after 3 days.

Contra-indications to NSAIDs - renal impairment peptic ulcer disease (refer to separate **parecoxib/etoricoxib** guidelines) platelet dysfunction/coagulopathy history of adverse reaction to aspirin or other NSAID

Use NSAIDs **with caution** in patients with asthma, cardiac failure, those at risk of renal impairment. In elderly postoperative patients and those with hypovolaemia, sepsis or dehydration, NSAIDs are best avoided.

Etoricoxib is a cyclo-oxygenase II (COX-II) inhibitor and can be thought of as a selective NSAID. It is as efficacious an analgesic as non-selective NSAIDs but causes fewer gastrointestinal erosions and has minimal anti-platelet effects. It should be reserved for patients considered to be high risk for GI adverse events, and should be used in the short-term only. Currently, COX II inhibitors are limited to **Specialist use only (Anaesthesia/Acute Pain Service/Outreach)**.

The anti-platelet effect of aspirin is blocked by NSAIDs, and the risk of MI and stroke is increased in patients taking both drugs concurrently, even in the short term. Patients on aspirin should avoid ibuprofen and diclofenac and COX II inhibitors, though naproxen may be an acceptable alternative in these patients. If it is deemed necessary to give any NSAID (including COX-II inhibitors) to patients on aspirin, the aspirin should be given 2 hours before the NSAID.

The diclofenac 75mg IM preparation should not be used (associated with persistent injection site pain, muscle necrosis and abscess formation).

• Codydramol 10/500

2 tabs 4-6 hourly prn

(maximum 8tabs/24 hours)

Codydramol 10/500 contains dihydrocodeine 10mg and paracetamol 500mg. This should be prescribed on a PRN basis for breakthrough pain, to accompany a regular NSAID prescription. MODERATE PAIN

Use combination of

- Regular Paracetamol (see above) and
- Regular NSAID or COX II Inhibitor (see above) and
- Moderate strength opioid (Dihydrocodeine or Tramadol)

Tramadol is a more potent analgesic than dihydrocodeine. 10% of the Caucasian population experience no pain relief from dihydrocodeine due to a lack of the relevant enzyme to convert the prodrug to its active form. Although tramadol may have some benefits over dihydrocodeine, there are some specific potential problems with tramadol and these need to be carefully considered **especially in the elderly** (see below).

• Dihydrocodeine 30mg 4-6 hourly PRN or regularly (maximum 240mg/24hours)

Avoid using 60mg dose as confers little additional analgesic benefit over the 30mg dosage and increases likelihood of constipation and other side effects. If the patient requires further analgesia, a strong opioid should replace dihydrocodeine

Or:

• Tramadol 50-100mg 4-6hourly PRN or regularly (maximum 400mg/24hours) (PO, IV or IM routes)

Tramadol is associated with fewer typical opioid side effects leading to less respiratory depression, sedation and constipation. The incidence of nausea and vomiting when given orally is thought to be similar compared to equianalgesic doses of other opioids, but can be severe following intravenous dosing. Some patients may be susceptible to unpleasant psychogenic reactions e.g. agitation, hallucinations, dysphoria, and elderly patients are susceptible to confusion and hallucinations so tramadol should be avoided.

Avoid using tramadol if there is a history of epilepsy, acute head injury, impaired conscious level because the risk of having seizures may be increased in these patients. Avoid using tramadol in pregnancy and breast-feeding.

Caution is advised if used in conjunction with tricyclic antidepressants or SSRIs (risk of serotonin syndrome). Do not give in combination with an MAOI antidepressant.

SEVERE PAIN

Use combination of

- Regular **Paracetamol** (see above) and
- Regular NSAID or COX II Inhibitor (see above) and
- Morphine by the appropriate route of administration

• Morphine PO (as Oramorph/ZOMORPH)

Prescribe Oramorph 0.3mg/kg 4 hourly initially (20 to 30 mg for most adults). Once total 24 hour opioid requirements are known, convert 24 hour short-duration Oramorph dose to long-acting Zomorph (split into 2 doses, 12 hours apart). You

	should also prescribe Oramorph PRN (2 hourly) for breakthrough pain at a dose of 0.3mg/kg
• Morphine IV	Intravenous morphine should be used to 'regain control' when a patient's pain is severe. It must be titrated in small increments. Give 1mg/min for 5 minutes, then 1mg every 5 minutes titrated until comfortable. Allow adequate time for it to work – peak effect from IV morphine does not occur until 10-15 mins after administration
• Morphine IM / SC	0.1 - 0.2 mg/kg 2 hourly PRN (reduce dose for elderly / frail patients).
	A subcutaneous cannula is preferred for repeated dosing
• Morphine PCA	A PCA is suitable for patients predicted to have an on-going requirement for strong opioids <i>and</i> unable to take oral medication. The patient should be titrated with intravenous morphine until comfortable <i>before</i> commencing the PCA.
	Contact Acute Pain Team (Recovery Room) or Duty Anaesthetist
• Oxycodone	This is reserved for specialist initiation only (Anaesthetist/Pain team/Outreach service)

Always prescribe a laxative with opioid prescriptions eg. Lactulose 15mls BD or Senna 15-30mg at night

ANTIEMESIS*

*refer to separate guideline for post-operative nausea and vomiting (PONV) management

Antiemetics should always accompany an opioid prescription. Remember that antiemetics by the oral route are ineffective in a nauseated or vomiting patient!

- Cyclizine 50mg IM /IV 8 hourly prn plus
- Prochlorperazine 12.5 mg IM/ PO (not IV) 8 hourly prn

2nd line Ondansetron 4mg IM / IV 8 hourly prn