Mid Essex Hospital Services NHS
NHS Trust

Guidance for Foundation Year 1 (FY1) trainee doctors: Acute Pain Management IPMS (Integrated Pain Management Service)	**Type: Clinical Guideline Register No: 07055 Status: Public**

Developed in response to:	Best Practice
Contributes to CQC Outcome number:	4

Consulted With	Post/Committee/Group	Date
Pain Consultants	Dr Tom Durcan, Dr Mark Alexander-Williams	2/10/2017
Service Manager Pain Department	Lynne Mustard	2/10/2017
Pain Specialist Pharmacist	Alison Bloor	2/10/2017
Professionally Approved By	Dr Mark Alexander-Williams	2/10/2017

Version Number	3.0
Issuing Directorate	IPMS (Integrated Pain Management Service)
Ratified by:	DRAG Chairmans Action
Ratified on:	29th October 2017
Executive Management Group	November 2017
Implementation Date	13th November 2017
Next Review Date	September 2020
Author/Contact for Information	Dr Mark Alexander-Williams and Jayne Somerset
Policy to be followed by (target staff)	FY1 Trainee Doctors
Distribution Method	Intranet and Website
Related Trust Policies (to be read in conjunction with)	Policy for the use of medicines Entonox (06000) Management of Severe Pain (06007) Management of Procedural Pain (06001) Epidural infusion and PCEA analgesia (06006) PCA (06010) Pain Assessment and Management on wards (11027) LA Peripheral blocks (12035) Non-pharmacological Management of pain Hand Hygiene v4.1 04072 Aseptic ANTT 08038

Document Review History

Version No	Reviewed by	Active Date
1.0	Dr Mark Alexander-Williams, Lynne Mustard	Created 2009
2.0	Dr Mark Alexander-Williams, Jayne Somerset	June 2014
3.0	Jayne Somerset	13 November 2017

INDEX

1. Purpose

2. Scope

3. Safety

4. Ground Rules

5. Analgesic Step Ladder and balanced analgesia

6. Treatment of Severe Pain - Opioids

7. Side effects of opioids

8. Mild opioids

9. Non-steroidal anti-inflammatory drugs (NSAID's)

10. Local anaesthetics

11. Non-pharmacological suggestions to ease pain

12. Implementation and evaluation of treatment

13. Staff training and communication

14 Risk Events & Incidences of Non-Compliance with this Policy

15 Audit and monitoring

16 References

Appendix 1: Foundation Year (FY1/2) Competency sheet – Acute Pain Management

1. Purpose of guideline

1.1 To enable FY1 level doctors to proactively acknowledge and treat patients' pain appropriately.

2. Scope

2.1 The document is to aid FY1 level doctors to treat patients in pain who are aged 18 years and over that they may see on the wards in the Trust.

3. Safety

3.1 The safest way to treat pain is to keep it simple.

- Assess
- Consider risks / contraindications to analgesics
- Treat, using balanced analgesia
- Evaluate
- Get help if needed
- Review regularly

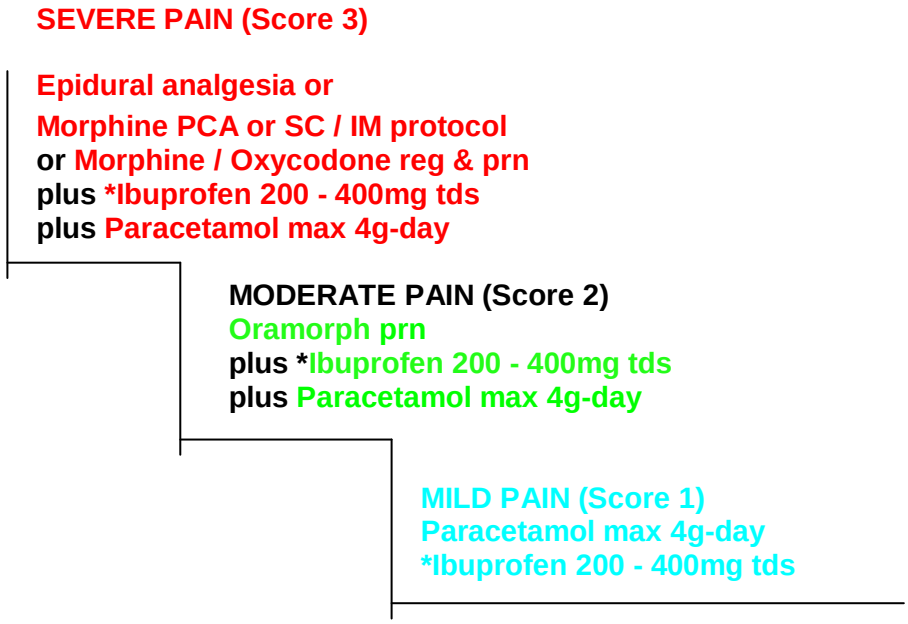
4. Ground rules

- Paracetamol is a good pain killer. Prescribe regularly
- Non-steroidal anti-inflammatory drugs (NSAIDs) can be dangerous – check for contra-indications and limit duration to 5 days at first. Consider gastric protection; proton pump inhibitor or H2 receptor blocker
- Choose your opioid and stick to it unless you have reason to change it
- Titrate according to the patient's needs and adjust background doses accordingly. PRN Oramorph or subcutaneous (SC) morphine is hourly to allow effective titration
- Using all three of the groups of analgesics is called 'balanced analgesia', and increases the chances of efficacy by targeting different parts of the pain mechanism at once. Additional use of adjuvants may be helpful depending on the type of pain
- Pre-empt adverse effects - prescribe anti-emetics and naloxone, consider bowel management. Use smaller doses in the elderly

5. Analgesic Step Ladder and balanced analgesia

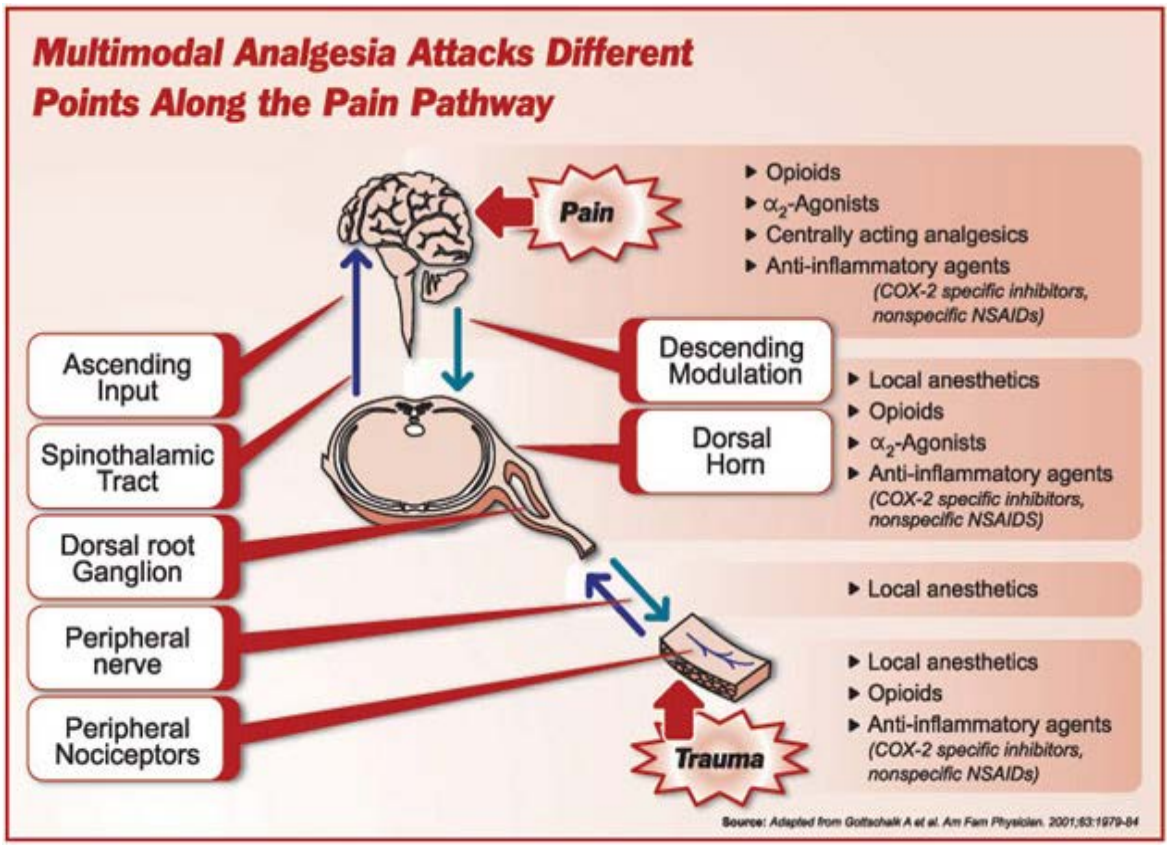
5.1 The analgesic stepladder below is a tool to promote a stepwise, logical approach to the treatment of mild, moderate and severe pain.

Acute Pain Stepladder



* NSAIDs should not be prescribed for more than 5 days in the first instance: caution in the elderly. Do not prescribe NSAIDs in the presence of renal impairment, dehydration, heart failure, active bleeding or a history of peptic ulceration.

5.2 **Balanced analgesia**



6. Treatment of Severe Pain (Please read with the guideline Management of Severe Pain (06007)

6.1 Opioids

Morphine IV, PCA, S/C, IM, PO

6.1.1 Is the standard drug of choice, as effective as any opioid, less likely to lead to addiction than some opiates and devoid of some unpleasant side-effects. No ceiling to dose, it should be titrated against the pain. Tolerance may occur with repeated use.

6.1.2 The intravenous route is only suitable for high dependency areas (A&E, ITU, CCU, recovery). Once analgesia is achieved, prescribe an alternative route for a maintenance regime; e.g. regular Oramorph, plus prn. Do not prescribe multiple routes like 'morphine 10mg IV/SC/IM'. Doses must be appropriate to the route – if 10mg SC works for the patient, you will need to prescribe 20-30mg orally to achieve the same effect. If the patient is requiring regular doses, consider converting to slow release bd as a background (Zomorph). At best the dose will be an educated guess, so keep hourly prn Oramorph available to the patient as rescue, or for procedural analgesia.

6.1.3 If you feel that a patient may benefit from Patient Controlled Analgesia (PCA) contact the pain team. Specific wards only accept patients with a PCA, these wards have had specialist training to enable them to safely look after the patient with this device. A list of wards that accept PCA's are readily available from Recovery. The SC morphine algorithm is a good alternative if the patient is unable to take drugs by mouth. Pre-printed prescription stickers are available:

See appropriate protocols for IM/SC/IV/PO/PCA

M.E.H.T. Prescription
Subcutaneous/Intramuscular
MORPHINE via indwelling cannula
Bolus: 7.5mg □10mg □ * please tick
Titration: 1hrly PRN
Date_____Signature _____
66 - 100kg = 10mg / 45 - 65.5kg = 7.5mg
As per IPMS guidelines

6.2 **Oxycodone**

Alternative to morphine, sometimes tolerated when morphine is causing excess sedation or nausea. The oral dose is 50% of the Oramorph dose. Consider using 5 to 10mgs p.o. in the first instance. Available as an intravenous preparation for PCAs.

6.3 **Fentanyl**

This is a third line drug for use in PCA; see IPMS for further advice.

7. Possible complications and side effects of opioids

7.1 Include:

- **Drowsiness**: If the sedation scores 2 or 3; consider naloxone. Treat as respiratory depression
- **Respiratory depression**: Maintain airway, give oxygen via facemask. If respiratory rate less than 8, consider Naloxone 0.1mg to 0.4mg, titrated to effect. Call for assistance
- **Anaphylaxis**: (Difficulty with breathing, rapid heart rate, low B.P, rash). Immediate crash call. Proceed as clinically indicated (oxygen, hydrocortisone, adrenaline)
- **Nausea and vomiting**: See algorithm. Treat early. Combination anti-emetics may be needed if one is ineffective (e.g. Ondansetron prn). Consider other causes
- **Constipation**: Laxative and/ or bulk forming agent, plus stimulant may be required. Always prescribe laxatives on the regular side and encourage oral fluid intake
- **Itching**: Calamine lotion applied topically. Antihistamine; e.g. Chlorphenarimine, Low dose Naloxone. Change opioid if problematic
- **Confusion/hallucinations**: Change opioid and review dose. Consider other causes

8. Mild opioids

8.1 Codeine, tramadol and dihydrocodeine can be useful, but have significant disadvantages when treating severe or variable pain, as they have ceiling doses, unlike morphine, oxycodone and fentanyl.

8.2 10% of the population cannot metabolise codeine. Tramadol in particular can cause unwanted side effects like dizziness and nausea. Tramadol has a dual action; as an opioid receptor agonist, and as an inhibitor of serotonin reuptake, so should not be used in people with a history of

seizures, or decreased seizure threshold (e.g. head injury), or alongside anti-epileptic or anti-depressant drugs.

8.3 Tramadol is best tolerated as a modified release preparation.

8.4 A low dose of Oramorph will provide good analgesia, and allow for repeat doses, when the patient's needs exceed background analgesia of paracetamol and NSAIDs. Oramorph in the 2mg/ml preparation is not a controlled drug.

9. Non-steroidal anti-inflammatory drugs (NSAID's)

9.1 Very effective analgesics, NSAIDs must be used with caution. They work by inhibiting prostaglandin synthesis, which reduces the inflammatory process responsible for transmission of pain impulses.

9.2 Possible side effects of NSAIDs

- **Gastrointestinal:** Acute local inflammation from oral NSAIDs is not uncommon, but rarely a significant problem. GI effects associated with the systemic effect of NSAIDs, regardless of the route of administration, should be taken seriously, and can be asymptomatic until bleeding or perforation occurs. Therefore, patients known to be at risk should not be offered NSAIDs. Risk factors are:
    - History of gastric ulceration
    - Severe acid reflux/hiatus hernia
    - Old age
    - Corticosteroid therapy
    - Anticoagulant therapy

  A proton pump inhibitor (PPI) or H2 receptor blocker (Ranitidine) have been shown to significantly reduce the risk of gastric irritation or bleeding when NSAID's are prescribed.

- **Bleeding**: NSAIDs inhibit platelet aggregation and prolong bleeding time. It is therefore inadvisable to give them to people at risk of bleeding – for example patients who have lost significant amounts of blood during surgery.

    - Never prescribe NSAIDs alongside anticoagulants or to people with clotting disorders.

- **Renal**: Renal failure can be caused by long-term high dose NSAIDs. In the short term normal kidney function will not be affected by NSAIDs. Patients with impaired renal function, or who are at risk of it (e.g. frail, dehydrated, elderly), should avoid NSAIDs until urea and creatinine levels are within 20% of normal range. A low dose may provide some analgesia while minimising risk. Beware using NSAIDs with other nephrotoxic drugs. Monitor renal function regularly.

10. Local anaesthetics

10.1 As membrane stabilisers, these drugs block the transmission of pain impulses. They are useful as topical applications and as local infiltration at ward level. Plexus blockade and central analgesia (spinal/epidural) with or without indwelling catheters, may be used peri-operatively, and is a specialist practice by anaesthetists. The pain team/anaesthetic department are available for advice.

Please read the guidelines LA Peripheral blocks (12035) and Epidural infusion and PCEA analgesia (06006) found on the intranet.

11. Non-pharmacological suggestions to ease pain

11.1 These are not to be used as substitutes to pharmacological solutions, but can be suggested to the patient to help with the pain. These may include distraction, meditation, relaxation, Imagery

techniques, massage, positioning, reading a book or magazine, listening to music, and watching the television.

12 Implementation and evaluation of treatment

12.1 Agree the plan with patient. Check they have no allergies or unwanted side effects that may have occurred with previous use. Previous problems with an analgesic may lead to the patient refusing analgesia.

12.2 Encourage them to alert nursing staff if pain uncontrolled, that they have 'rescue' pain killers prescribed but they will need to ask for these. Ensure PRN (rescue) analgesia prescribed and are dose appropriate.

12.3 Ensure multi-modal analgesia prescribed unless potential complications could arise.

12.4 Check with the patient daily if their pain is controlled, if not revise your plan.

12.5 Get help / advice if pain is uncontrolled despite taking the above steps. Contact the IPMS or the anaesthetic department.

13. Staff training and communication

13.1 FY1 Doctors are expected to have an understanding for the need of assessing and treating pain proactively, effectively, and safely.

13.2 The IPMS (Integrated Pain Management Service) is available for advice and consultation via the pager system, and through the PAS referral system.

13.3 Assessment sheet is to be completed.

13.4 Training and education is provided by the IPMS, both formally and informally for all clinical staff.

13.5 Corporate services will ensure that the guideline is uploaded to the intranet and the website and notified to staff via Focus.

13.6 In addition to the guideline there is an on-line teaching package for Doctors within the Trust. This is available on the intranet. There are 3 modules; Mechanisms and definitions of pain, pain assessment, and pain management. These are to be completed in addition to the face to face pain orientation session given by the IPMS.

14. Risk Events & Incidences of Non-Compliance with this Policy

14.1 The on-line risk event form (Datix) should be completed when there is non-compliance with this policy that has impacted negatively on the patient.

15. Audit and monitoring

15.1 Yearly audit of patient pain scores on wards is carried out by the IPMS. Scores where pain is uncontrolled are examined for their reason.

15.2 Incidence of clinical risk or patient complaints resulting from non-compliance of this guideline is recorded via the central risk events database and PALS if involved.

15.3 The IPMS manager and lead consultant will liaise at corporate level to put strategies in place to address issues.

16. References

Acute Pain Management: www.painsociety.com

http://www.rcoa.ac.uk/system/files/CSQ-ARB-section11.pdf

http://www.medicine.ox.ac.uk/bandolier/booth/painpag/index2.html

http://fpm.anzca.edu.au/documents/apmse4_2015_final
Australian and New Zealand College of Anaesthetists and Faculty of Pain Medicine
ACUTE PAIN MANAGEMENT: SCIENTIFIC EVIDENCE Fourth Edition 2015

For the on-line teaching links to go in here once url known

Appendix 1: Foundation Year (FY1/2) Competency sheet – Acute Pain Management

Mid Essex Hospital Services NHS Trust
Integrated Pain Management Service

Foundation Year Doctors (FY1/2) Name_____

Competency Sheet – Acute pain management

Please ensure that a member of the IPMS signs off these competencies with you when you attend the Friday clinical round. You will be expected to have read the Trust's pain guidelines; which can be accessed on the Trust's intranet, and have an understanding of basic acute pain management strategies. Completion of the on-line teaching modules prior to the clinical ward round is desired, however can be completed afterwards.

					Mentor	Trainee
1.	I have received and read the Pain Service handout on the principles of acute pain management					
2.	I have read the Trust guidelines on acute pain management					
3.	I have completed the on-line pain training accessed via the intranet					
	Module	Mechanisms	Assessment	Management		
	Completed (Y/N)					
3.	I have attended a clinical pain round					
4.	I am aware of how to contact the pain team					
5.	I have demonstrated an understanding of:					
	• Physiology of pain mechanisms					
	• Clinical risks of poor pain management					
	• Principles of pain assessment					
6.	I have demonstrated an understanding of analgesic drugs					
	Drug	**actions**	**precautions**	**adverse effects**		
	Opioids					
	NSAIDs					
	Paracetamol					

Signatures:		Date
Trainee		
Mentor		