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CLINICAL EFFECTIVENESS COMMITTEE

GUIDELINE FOR THE MANAGEMENT OF PAIN IN CHILDREN

Introduction

- Pain management is one of the most important components in patient care, which is why it is given such a high priority in the BAEM 'Clinical Standards for A&E Departments[1] and the National Triage Scale[2].
- Pain is commonly under-recognised, under-treated and treatment may be delayed. Reasons include difficulty in assessing severity, the child may not appear distressed or have difficulty describing / admitting to pain. Drug choice and dosage may also cause problems due to unfamiliarity.
- Recognition and alleviation of pain should be a priority when treating ill and injured children. This process should start at the triage, be monitored during their time in A&E and finish with ensuring adequate analgesia at, and if appropriate, beyond discharge.
- *The BAEM Clinical Effectiveness Committee standard* of analgesia for moderate & severe pain within 20 minutes of arrival in A&E should be applied to children in all A&E Departments. An audit against these standards should be done annually.
- In treating pain, pay attention to the other factors distressing the child such as fear of the unfamiliar environment and people, parental distress, people in uniforms, needle avoidance, fear of injury severity etc.
- Training for all staff involved in patient care is essential to ensure quality and timely management.

Pain assessment

- Pain assessment forms an integral part of the National Triage Scale[1].
- Multiple assessment tools are in use. The better known scales have not been validated in the context of an A&E environment, where the atmosphere is tense and the child and parent are using such tools for the first time, but nevertheless are satisfactory for the purpose of pain assessment and management.
- The pain ladder contains objective and subjective descriptions with a numerical scale. Some scales are based solely on faces[4], and the APLS pain ladder[5] combines objective and subjective descriptions with panda faces. BAEM recommends the use of the attached assessment tool or a locally developed alternative.
- The experience of the member of staff triaging the child will help in estimating the severity of the pain. In addition, we rely on visual clues such as crying or loss of movement of a limb, which can be measured by behavioural scoring systems such as the CHEOPS score[3], which are particularly useful in non-verbal children.

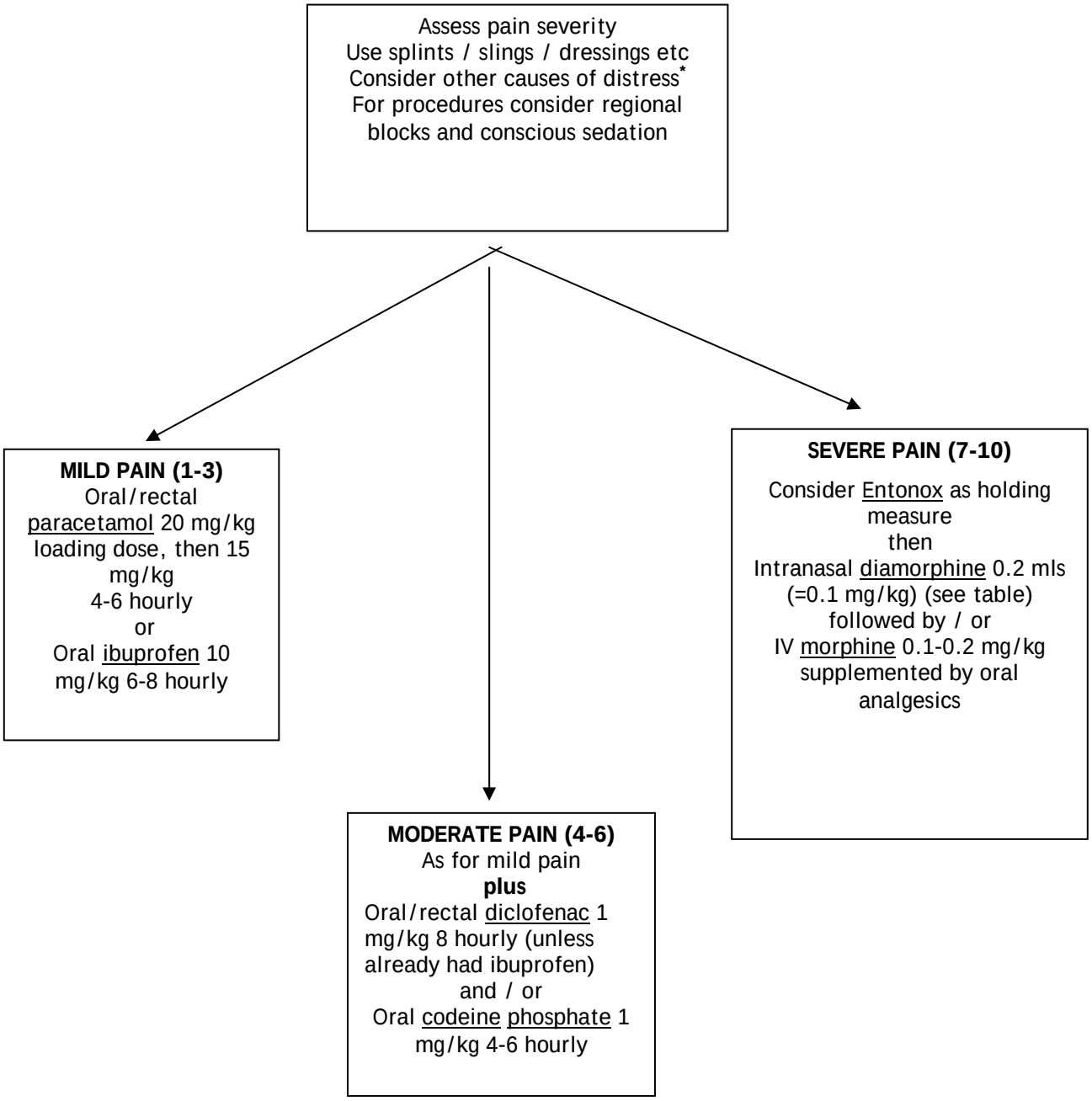
How to treat pain

- Psychological strategies: involving parents, cuddles, child-friendly environment, and explanation with reassurance all help build trust. Also, distraction with toys, blowing bubbles, reading, or story-telling using superhero or magical imagery to make the pain go away
- Non-pharmacological adjuncts such as limb immobilisation, dressings for burns
- Pharmacological agents, via a variety of routes: **see attached algorithm**. Also local or regional anaesthesia are useful (e.g. femoral and auricular blocks). For procedures, departments may consider conscious sedation using ketamine (IV / IM) or midazolam (oral or intranasal).

References

1. Clinical Effectiveness Committee. January 2002.
2. Emergency Triage. BMJ Publishing Group, 1997.
3. McGrath PJ *et al,* CHEOPS: A behavioural scale for rating postoperative pain in children. *Advances in Pain Research and Therapy,* vol 9, Ed. Fields, Raven Press, 1985.
4. Wong-Baker Faces Pain Scale. Adapted from Whaley L, Wong DL. Nursing care of infants and children. 3rd ed. St Louis: The CV Mosby Company, 1987.
5. Advanced Paediatric Life Support, 3rd ed. BMJ Publishing Group, 2001.

Algorithm for treatment of acute pain in children in A&E



*Other causes of distress include: fear of the unfamiliar environment, parental distress, fear of strangers, needle phobia, fear of injury severity etc

CONTRA-INDICATIONS

Ibuprofen / diclofenac: avoid if previous reactions to NSAID's or in moderate or severe asthmatics

Intravenous morphine: use with caution if risk of depression of airway, breathing or circulation.

Assessment of acute pain in children in A&E

	No Pain	Mild Pain	Moderate Pain	Severe Pain
Faces Scale Score				
Ladder Score	0	1-3	4-6	7-10
Behaviour	*Normal activity *No ↓ movement * Happy	*Rubbing affected area *Decreased movement *Neutral expression *Able to play / talk normally	*Protective of affected area *↓ movement / quiet *Complaining of pain *Consolable crying *Grimaces when affected part moved / touched	* No movement or defensive of affected part *Looking frightened *Very quiet *Restless, unsettled *Complaining of lots of pain *Inconsolable crying
Injury Example	Bump on head	Abrasion Small laceration Sprain ankle / knee # fingers / clavicle Sore throat	Small burn / scald Finger tip injury # forearm / elbow / ankle Appendicitis	Large burn # long bone / dislocation Appendicitis Sickle crisis
Category chosen (tick)				

Intranasal Diamorphine

For acute pain

Dilute 10 mg of diamorphine powder with the specific volume of Sterile Water.

Childs Weight	Vol. Sterile Water
10 Kg	1.9 mls
15 Kg	1.3 mls
20 Kg	1.0 mls
25 Kg	0.8 mls
30 Kg	0.7 mls
35 Kg	0.6 mls
40 Kg	0.5 mls
50 Kg	0.4 mls
60 Kg	0.3 mls

Instil 0.2 mls of the solution into one nostril, using a 1-ml syringe
(gives 0.1 mg / kg in 0.2 ml)

Notes for use

- Using this composite method of pain scoring it should be possible to group children into one of four categories.

- In some children, it will not be possible to obtain a value for each of the indicators, however a generalised, majority score may be obtained.

- Once the category has been established, appropriate analgesia may be prescribed according to the flow chart.

- An example of injury is only intended as a guide. However based on the professional's own knowledge, it is possible to infer the likely severity of the pain experienced.

- In all cases it is important to think of using other non-pharmacological techniques to achieve analgesia. These may include play and distraction or other measures such as applying a dressing or immobilising a limb.

- Following reassessment if analgesia is still found to be inadequate, stronger analgesics should be used along with the use of non-pharmacological measures.

- Points to remember:-

1. A child who has had intra-nasal diamorphine only requires monitored observation for 20 minutes.
2. Children who fall into the moderate / severe categories should also be given basic analgesia.
3. Most children can and are able to use entonox, remember this may be a valuable source of analgesia whilst waiting for oral analgesia to work.

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