ASSESSMENT AND MANAGEMENT OF ACUTE PAIN IN PAEDIATRIC OUTPATIENTS AGED BETWEEN 1 MONTH AND 15 YEARS

MARCH 2000

Guidelines Department
These guidelines were produced at the request of the Ministry of Health. They were produced by ANAES in partnership with the following organisations:

La Société Française de la Douleur;
L’Association Française pour la Recherche et l’Evaluation en Kinésithérapie;
La Société Française d’Anesthésie-Réanimation;
La Société Française de Pédriatrie;
L’Association des Anesthésistes-Réanimateurs Pédiatriques d’Expression Française;
Le Collège National des Médecins de la Douleur;
L’Association Pédagogique Nationale pour Enseignement de la Thérapeutique;
La Société Française d’Oncologie Pédiatrique,
La Fédération Française de Psychiatrie.

The method used was the method described in the guide “Recommandations pour la Pratique Clinique – Base méthodologique pour leur réalisation en France – 1999” [“Clinical Practice Guidelines – Methodology to be used in France – 1999] published by ANAES.

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ANAES - the Agence Nationale d’Accréditation et d’Évaluation en Santé - would like to thank the members of the Management Committee, the Working Group, the members of the Reading Group and the members of the Scientific Council, whose names are listed below. ANAES would also like to thank Hakim Neghal for his help with the literature review.
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GUIDELINES

These clinical practice guidelines for “Assessment and management of acute pain in paediatric outpatients aged between 1 month and 15 years” were produced at the request of the Ministry of Health, and are intended for all health professionals involved in managing acute pain in children.

Proposals are graded A, B or C according to the following system:

- A grade A guideline is based on scientific evidence established by trials of a high level of evidence, for example randomised controlled trials of high-power and free of major bias, meta-analyses of randomised controlled trials or decision analyses based on properly conducted studies;

- A grade B guideline is based on presumption of a scientific foundation derived from studies of an intermediate level of evidence, for example randomised controlled trials of low power, well conducted non-randomised controlled trials or cohort studies;

- A grade C guideline is based on studies of a lower level of evidence, for example case-control studies or case series.

In the absence of scientific evidence, the proposed guidelines are based on agreement among professionals.

INTRODUCTION

It has been shown that children can feel pain as soon as they are born. It is an ethical and legal obligation to relieve this pain. In addition, a child can be harmed by pain, while there is no evidence to suggest that a child can gain any benefit from it.

These guidelines concern the assessment and management of pain in child outpatients aged between one month and 15 years. The term outpatient covers care at home, care given during a consultation, emergency care (including SMUR\(^1\) and SAMU) and care in day hospitals.

DEFINITION

The term acute pain involves three different concepts: severity, sudden nature and type of pain. The definition used is that adopted in DGS/DH/DAS circular no. 99/84 of 11 February 1999: “Acute pain is a sharp, burning sensation which is part of a rapidly changing clinical picture.”

\(^1\) SMUR and SAMU are ambulance services
INSTRUMENTS FOR ASSESSING PAIN SEVERITY

One of the obstacles to managing pain in children is the problem of identifying and assessing it. Pain is best managed when assessed at the outset and when treatment is reassessed regularly.

It is generally necessary to use a pain assessment instrument in order to:

- establish or confirm the presence of pain;
- assess its severity;
- decide what type of analgesia is needed;
- evaluate the efficacy of treatment given;
- adjust treatment.

Pain assessment instruments are simple to use, and may be given to parents so that they can reassess their child's pain and adjust treatment accordingly. The instruments vary according to the child's age (Fig. 1).

Best validated instruments according to age bracket

— Children aged over 6 years

For children aged over 6 years, self-assessment (i.e. an assessment of the child's pain made by the child itself) has been found to be an excellent form of measurement. It may therefore be used in full confidence, provided that it is explained in a way the child can understand.

The visual analogue scale (VAS) is regarded as the gold standard assessment instrument for children of this age (Fig. 2). A VAS should not be presented as in any sense a game. The extreme grades should be expressed in neutral terms. In France, a vertical scale graded from 0 to 10 is usually presented to children.

However, with some children it is not possible to use a VAS to obtain a grade (Fig. 2). Another scale that can be used for self-assessment is the Poker Chip scale (Fig. 3). The expert group also proposed the use of a scale containing six faces, the FPS-R (Fig. 4), which is currently being validated. A diagram should also be used to locate the pain (Fig. 5) when this information is not clear from the context. However, it should be remembered that the child may confuse right and left.

The same instrument should ideally be used for self-assessment during follow-up.

— Children aged between 4 and 6 years

Self-assessment can be tried with children aged between 4 and 6 years. The VAS should then be used in conjunction with another self-assessment instrument, such as the Poker Chip scale or the Faces scale. If different scores are obtained from the two instruments, they should be regarded as not valid, i.e. not providing information. In this event, assessment can only be done by a third party.
If a diagram for pain localisation is used for children aged between 4 and 6 years, it should be related to the data obtained from clinical examination. If there is no relationship between the two sets of data, the localisation on the diagram cannot be regarded as valid. At this age a child might colour in the diagram as a game.

The same instrument should ideally be used for self-assessment during follow-up.

— **Children aged under 4 years**

Assessing a child under 4 years (or a child who is temporarily or permanently unable to communicate properly) is more difficult, as it mainly involves observing how the child behaves (assessment by a third party). Behavioural expression of acute pain has two phases:

- the first phase consists of expression of behavioural distress combined with psychological and physiological stress;
- the second phase consists of a gradual reduction in the child's activity (moving, playing, sleeping, talking, eating).

There is no absolutely specific pain-related behaviour which could be used as an indicator. Third-party assessment instruments are therefore particularly useful, as they are based on a combination of the best currently known pain indicators, which have been brought together into validated scales. At present, these scales are the most reliable criteria for diagnosing pain in young children and for assessing its intensity.

**Most widely used scales**

- for diagnosis and assessment of the intensity of immediate postoperative pain:
  - inverse Amiel-Tison scale (*Table 1*), for children aged between 1 month and 3 years,
  - OPS scale (*Objective Pain Scale*) from the age of 2 months (*Table 2*),
  - CHEOPS scale (Children’s Hospital of Eastern Ontario Pain Scale) from 1 to 6 years (*Table 3*);
- for diagnosis and assessment of the intensity of other forms of acute pain, at onset:
  - abbreviated NFCS scale (Neonatal Facial Coding System), up to 18 months (*Fig. 6*),
  - the CHEOPS scale from 1 to 6 years;
- for the assessment of acute pain after several hours:
  - the DEGR* scale (*Douleur Enfant Gustave-Roussy - Gustave-Roussy Child Pain Scale*) may be used between 2 and 6 years (*Table 4*),
  - a general assessment of the child's behaviour may also be used, i.e. disruption of the child's basic activities including moving, playing, sleeping, talking, and eating (associated with a situation where pain may be present).

A VAS completed by an experienced carer or parent is an alternative to the use of a third-party assessment scale in children aged under 4 years, although it should be remembered that its validity is less reliable than that of the scales cited above.
Table 1. The inverse Amiel-Tison postoperative pain scale

<table>
<thead>
<tr>
<th></th>
<th>Score&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
</tr>
<tr>
<td>1. Whether asleep during the 30 mins before examination</td>
<td>Calm sleep &gt; 10 minutes</td>
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<tr>
<td>2. Gestures expressing pain</td>
<td>Face calm and relaxed</td>
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<tr>
<td>3. Quality of crying</td>
<td>No crying</td>
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<tr>
<td>4. Spontaneous movement</td>
<td>Moves normally</td>
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<tr>
<td>5. Spontaneous excitability</td>
<td>Calm</td>
</tr>
<tr>
<td>6. Tensing of fingers, hands and feet</td>
<td>No tensing</td>
</tr>
<tr>
<td>7. Sucking</td>
<td>Strong, rhythmic, calming</td>
</tr>
<tr>
<td>8. Global assessment of tone</td>
<td>Normal for age</td>
</tr>
<tr>
<td>9. Consolability</td>
<td>Calmed within a minute</td>
</tr>
<tr>
<td>10. Sociability</td>
<td>Easy, prolonged</td>
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</table>

<sup>a</sup> Child awake when examined

Table 2. Objective Pain Scale (OPS).

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>Crying</th>
<th>Moving</th>
<th>Agitation</th>
<th>Verbal Evaluation or body language</th>
<th>Blood Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0: Not crying</td>
<td>0: None</td>
<td>0: Patient asleep or calm</td>
<td>0: Patient asleep or states no pain</td>
<td>0: ± 10 % Pre-Op</td>
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<tr>
<td></td>
<td></td>
<td>1: Crying but responds to tender loving care (TLC)</td>
<td>1: Restless</td>
<td>1: Mild</td>
<td>1: Mild pain (cannot localise)</td>
<td>1: 10 to 20% Pre-Op</td>
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<tr>
<td></td>
<td></td>
<td>2: Crying and does not respond to TLC</td>
<td>2: Thrashing</td>
<td>2: Hysterical</td>
<td>2: Moderate pain (can localise) verbally or by pointing or adopts position with legs drawn up to trunk, fists clenched, and moves hand to painful area, or tries to protect it</td>
<td>2: 20 to 30% Pre-Op</td>
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Table 3. Children’s Hospital of Eastern Ontario Pain Scale (CHEOPS) postoperative pain scale.

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>Cry</th>
<th>Facial</th>
<th>Child verbal</th>
<th>Torso</th>
<th>Touch</th>
<th>Legs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1: No cry</td>
<td>0: Smiling</td>
<td>0: Talks about other things without complaint</td>
<td>1: Body (not limbs) is at rest; torso is inactive</td>
<td>1: Child is not touching or grabbing at wound</td>
<td>1: Relaxed or gentle movements</td>
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<tr>
<td></td>
<td></td>
<td>2: Moaning or crying</td>
<td>1: Composed, neutral</td>
<td>1: Child not talking; or complains, but not about pain</td>
<td>2: Body is in motion in a shifting or serpentine fashion and/or body is arched or rigid or shuddering, and/or restrained</td>
<td>2: Child is reaching for or touching or grabbing the painful area, or child is restrained</td>
<td>2: Restless, or striking out with foot or feet, or legs tensed, in the air or pulled up tightly to body and/or standing, crouching or kneeling, and/or restrained</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3: Screaming or sobbing</td>
<td>2: Grimace</td>
<td>2: Child complains about pain</td>
<td></td>
<td></td>
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Total score

Relationship of self-assessment instruments to pain intensity

As there is no consensus agreement on how the various self-assessment instruments correspond to the pain categories used in marketing authorisations (AMM) for analgesics, i.e. “mild”, “moderate”, “severe” and “very severe”, the working group proposed the following values (Table 5):
Table 4. The DEGR® scale

GUSTAVE-ROUSSY CHILD PAIN SCALE®

Date: ..........................  Name of tester: ..........................

ITEM 1: PAIN AVOIDANCE AT REST
The child spontaneously avoids a certain position or adopts a specific posture, even when awkward, to relieve a painful area. This item should be studied when the child is sitting or lying down, without any physical activity. It should not be confused with antalgic posture during movement.

SCORE:
0: No antalgic posture; the child can adopt any position he likes.
1: The child seems to be avoiding certain positions.
2: The child usually certain positions, but does not appear to be uncomfortable.
3: The child chooses an obviously antalgic posture which gives him some relief.
4: The child unsuccessfully tries to adopt an antalgic position and fails to get comfortable.

ITEM 2: LACK OF EXPRESSION
Concerns the child’s ability to register and express feelings by his tone of voice, eyes and facial expression. This item should be studied when the child has a reason for being active (during play, meals and conversation).

SCORE:
0: The child is alert and lively, with an animated expression.
1: The child appears to be impasive and dull.
2: At least one of the following signs:
   - lack of facial expression, expressionless eyes, muttering and speaking in a monotonous voice, not speaking readily.
   - A number of the signs described above are marked.
3: Face rigid, as though enlarged; Vacant look; Speaks with some effort.

ITEM 3: SPONTANEOUS PROTECTION OF PAINFUL AREAS
The child is careful all the time to avoid contact with a painful area.

SCORE:
0: The child does not make any attempt to protect himself.
1: The child avoids violent contact.
2: The child protects his body, avoiding and moving away anything that could touch it.
3: The child is visibly concerned to restrict any touching of his body.
4: All the child’s attention is required to protect the affected area.

ITEM 4: EXPRESSING PAIN
This item concerns the way in which the child says that he is in pain, either spontaneously or when asked, during the period of observation.

SCORE:
0: No complaint, the child has not said that he is in pain.
1: Neutral” complaints:
   - no expression of emotion (e.g., just says “it hurts”) and does not go out of his way to say this.
   - at least one of the following signs:
     - he triggered the question “what’s wrong, does something hurt”?
     - he uses a whining voice to say that he is in pain
     - expressive gestures accompanying the complaint.
2: In addition to Score 1, the child:
   - has attracted attention to say that he is in pain.
   - has asked for medicine.
3: When the child says he is in pain he is groaning, sobbing or pleading.

ITEM 5: PAIN AVOIDANCE WHEN MOVING
The child spontaneously avoids all movement, or using part of his body. This item should be scored during any sequences of movements (e.g. walking) that he may be asked to perform. Should not be confused with moving slowly or infrequently.

SCORE:
0: The child has no difficulty moving any part of his body. His movements are supple and he moves easily.
1: Some of the child’s movements cause him discomfort or are not quite natural.
2: The child is careful when making certain movements.
3: The child is clearly avoiding certain movements, and generally moves with great care.
4: To avoid movements which are too painful for him, the child has to be helped.

ITEM 6: LACK OF INTEREST IN SURROUNDINGS
Concerns the child’s energy in interacting with his environment.

SCORE:
0: The child is full of energy, interested in his environment, able to concentrate and to amuse himself.
1: The child is interested in his environment, but without any enthusiasm.
2: The child gets bored easily, but can be stimulated.
3: The child hangs back, unable to play, looking on passively.
4: The child is apathetic and indifferent to everything.

ITEM 7: HOW THE CHILD REACTS TO BEING MOVED (passive movement)
When the child has to be moved for an everyday event (bath, meal), he is wary, says how he wants to be moved, stops the adult’s hand or holds onto it.

SCORE:
0: The child allows himself to be moved and does not give the movement any special attention.
1: The child watches carefully when moved.
2: In addition to Score 1, the child shows that the person moving him has to be careful.
3: In addition to Score 2, the child holds back the carer’s hand or guides their movements.
4: The child resists anything the carer does or makes the carer agree not to make any movement without his permission.

ITEM 8: INDICATING PAINFUL AREAS
The child locates his pain, either spontaneously or when asked.

SCORE:
0: No indication: at no time does the child say that any part of his body hurts.
1: The child indicates verbally: only that it hurts somewhere but without giving any details.
2: In addition to Score 1, the child uses a vague gesture to indicate where it hurts.
3: The child points to a specific painful area.
4: In addition to Score 3, the child describes confidently and precisely where it hurts.

ITEM 9: REACTIONS TO EXAMINATION OF PAINFUL AREAS
Examination of the painful area triggers a guarding movement by the child, or withdrawal, and an emotional reaction. Record only reactions which were caused by the examination, and not pre-existing reactions which were present before the examination.

SCORE:
0: The examination does not trigger any reaction.
1: The child is reticent while being examined but not otherwise.
2: At least one of the following signs is observed during the examination: stiffness in the area being examined, tensing of the face, sudden crying, holding his breath.
3: In addition to Score 2, the child changes colour, sweats, moans or tries to stop the person examining him.
4: The child’s reactions make it almost impossible to examine the painful area.

ITEM 10: SLOWNESS AND INFREQUENCY OF MOVEMENTS
The child’s movements are slow, restricted and rather stiff, even at a distance from painful areas. The trunk and large joints are particularly immobile. Should be scored in relation to the normal movements of a child of this age.

SCORE:
0: The child’s movements are expansive, lively, quick, varied and he takes some pleasure in them.
1: The child is a little slow and moves without any vivacity.
2: One of the following signs:
   - delayed movements.
   - restrained movements.
   - slow gestures.
   - starts motor activity infrequently.
   - a number of the above signs are marked.
3: The child appears to be stuck to the spot, although nothing is stopping him moving.
**Table 5.** Relationship of self-assessment instruments to pain intensity, and intervention thresholds for self-assessment and third party assessment instruments.

<table>
<thead>
<tr>
<th>Type of pain</th>
<th>Self-assessment instruments</th>
<th>Third party assessment instruments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>VAS (cm)</td>
<td>Poker chip (Number of chips taken)</td>
</tr>
<tr>
<td>Mild</td>
<td>1 - 3</td>
<td>1</td>
</tr>
<tr>
<td>Moderate</td>
<td>3 - 5</td>
<td>2</td>
</tr>
<tr>
<td>Severe</td>
<td>5 - 7</td>
<td>3</td>
</tr>
<tr>
<td>Very severe</td>
<td>&gt; 7</td>
<td>4</td>
</tr>
</tbody>
</table>

- The wording of AMM indications for Level 3 analgesics does not include the phrase “very severe pain”, but generally, “severe pain which does not respond to lower-level analgesics.
- The threshold above which treatment must be started. Below this threshold, treatment remains to be assessed by the child, carer or parents.

**RULES FOR MANAGING PAIN IN CHILDREN**

**Treatment with analgesics**

Analgesia should be offered when the treatment for the cause of the pain is prescribed. The main aim is to relieve pain rapidly, and this will affect the choice of drug used and how it is given.

The immediate aim of analgesic treatment is to achieve a pain threshold below the VAS threshold value of 3/10, if possible, and/or to allow the child to return to the basic activities of moving, playing, sleeping, talking and eating. The initial prescription depends on the level of pain. The first choice of treatment for mild pain is a Level 1 analgesic, for moderate pain it is a Level 1 or 2 analgesic, for severe pain, a Level 2 or 3 analgesic, and for very severe pain, a Level 3 analgesic. A rapid route of administration should be used if pain is severe or very severe. Outside the hospital environment, the drug should be given by the doctor himself or herself. Doctors should keep major analgesics in their emergency kit.

The second aim is to adjust treatment quickly according to the level of residual pain. Pain should be reassessed after one or two doses of analgesic. If at this time the pain is more
severe than 3/10, analgesic therapy should be intensified. When adjusting treatment in outpatients, the parents should be given adequate information and specific instructions should be included on the prescription, i.e. regular doses for a given period, how and when to assess pain, and how to change drug levels. Side effects should be looked for regularly, and the parents should be aware of this.

When the right level of analgesia has been obtained, pain recurrence should be prevented by regular doses of analgesics (including at night) for the foreseeable duration of the pain. In addition, pain that is foreseeable, i.e. occurring during certain types of medical care or procedures, should be prevented. Both the child and the child’s family should be given detailed information about care procedures and an analgesia schedule.

— Non-pharmacological methods
In addition to analgesics, pain management may include non-pharmacological methods (distraction, relaxation, hypnosis). If the child can describe the coping mechanism he normally uses, it should be offered and used. If not, and for younger children, distraction is often an effective aid in reducing distress and/or pain. Simple techniques include:

- **distraction**: reading a book to a child, or showing him pictures; for older children, suggesting the child tells himself a story;
- **relaxation**: mimic the type of breathing needed to make soap bubbles when breathing through a straw.

— Presence and role of parents
Children are less distressed when their parents are with them. It should be possible for parents to be present when painful procedures are performed and in any situation when the child is likely to feel pain, whenever the child and their family want this. Parents may need advice about their role in such situations. During the procedure, parents should maintain warm, distracting and reassuring physical and oral contact with their child, which may help to reassure the child that he is being well cared-for.

— Giving the child information
The child should be given appropriate information for his cognitive level about the cause of his pain and/or about any painful procedures which may be necessary to manage the pain. Such explanations should not be given at the very last moment. This information is a child’s right and it is an obligation of health care professionals to provide it.

CLASSIFICATION OF ANALGESICS

Table 6 gives the various analgesics which have been granted an AMM for paediatric use. These analgesics have been classified according to the WHO classification’s three therapeutic levels according to their mode of action and/or analgesic power:

- Level 1: non-opioid analgesics;
- Level 2: mild centrally acting analgesics;
- Level 3: opioids (or strong centrally acting analgesics).
It should be noted that no Level 2 analgesics have been granted an AMM for use in children aged under 1 year; and that there are no oral Level 3 analgesics for use between birth and the age of 6 months.
Fig. 1 Pain assessment instruments in relation to age

VAS: Visual Analogue Scale; FPS-R: Faces Pain Scale-Revised; NFCS: Neonatal Facial Coding System; OPS: Objective Pain Scale; CHEOPS: Children’s Hospital of Eastern Ontario Pain Scale; DEGR R: Gustave-Roussy Pain Scale.
Reverse of ruler

Side shown to child

[très très mal = Hurts very much]

**Fig. 2.** Visual Analogue Scale.
The child is told to move the pointer (or point his/her finger) as high as his/her pain is bad.
Faces Pain Scale – Revised (FPS-R)

"These faces show how much something can hurt. This face (point to left-most face) shows no pain. The faces show more and more pain (point to each from left to right) up to this one (point to right-most face) - it shows very much pain. Point to the face that shows how much you hurt right now."

Score the chosen face 0, 2, 4, 6, 8, or 10, counting left to right, so '0' = 'no pain' and '10' = 'very much pain'.

- Express the extreme points clearly: 'no pain' and 'very much pain'.
- Do not use words like 'happy' and 'sad'.
- The scale is intended to measure how children feel inside, not how their face looks. ‘Show me how you feel inside’


Version: June 2001

Fig. 4. Presentation of the Six Faces Pain Scale FPS-R
Fig. 3. Poker Chip scale: the poker chips.

The child is told: “Each poker chip is a little bit of the hurt; take the number of pieces that show how much hurt you have at the moment.”

It hurts:
A bit □
Quite a bit □
Rather a lot □
Very badly □

Fig. 5. Locating pain on a diagram.

The child is told: “Draw where it hurts you.” If the child is able to, he/she can first choose a colour code for the four levels of pain shown in the key.
Fig. 6. Abbreviated *Neonatal Facial Coding System*.

The observer grades each item as 0 = absent or 1 = present. Grades are added together to give the score.
Table 6. Analgesic medicines and analgesics with an AMM that may be used in paediatrics: summary by level and by age (from *Agence Française de Sécurité Sanitaire des Produits de Santé (AFSSAPS*) = French Agency for the Safety of Health Products)

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Neonate 0-28 days</th>
<th>Infant 1 mth-2 yrs</th>
<th>Child 2 yrs-12 yrs</th>
<th>Adolescent 12 yrs-15 yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&gt; 1 mth</td>
<td>&gt; 6 mths</td>
<td>&gt; 12 mths</td>
<td>&gt; 30 mths</td>
</tr>
<tr>
<td>Paracetamol PO*</td>
<td>Paracetamol PO</td>
<td>Paracetamol PO</td>
<td>Paracetamol PO</td>
<td>Paracetamol PO</td>
</tr>
<tr>
<td>Propacetamol IV</td>
<td>Propacetamol IV</td>
<td>Propacetamol IV</td>
<td>Propacetamol IV</td>
<td>Propacetamol IV</td>
</tr>
<tr>
<td>Aspirin PO</td>
<td>Aspirin PO</td>
<td>Aspirin PO</td>
<td>Aspirin PO</td>
<td>Aspirin PO</td>
</tr>
<tr>
<td>Ibuprofen PO</td>
<td>Ibuprofen PO</td>
<td>Ibuprofen PO</td>
<td>Ibuprofen PO</td>
<td>Ibuprofen PO</td>
</tr>
<tr>
<td>Niflumic acid suppositories</td>
<td>Niflumic acid suppositories</td>
<td>Niflumic acid suppositories</td>
<td>Niflumic acid suppositories</td>
<td>Niflumic acid suppositories</td>
</tr>
<tr>
<td>Level 2</td>
<td>Codeine PO</td>
<td>Codeine PO</td>
<td>Codeine PO</td>
<td>Codeine PO</td>
</tr>
<tr>
<td></td>
<td>Codeine PO</td>
<td>Codeine PO</td>
<td>Codeine PO</td>
<td>Codeine PO</td>
</tr>
<tr>
<td></td>
<td>Nalbuphine I*</td>
<td>Nalbuphine I</td>
<td>Nalbuphine I</td>
<td>Nalbuphine I</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*: PO: *per os*; IV: intravenous; I: injectable;
### Table 6 (contd). Analgesic medicines and analgesics with an AMM that may be used in paediatrics: summary by level and by age (from *Agence Française de Sécurité Sanitaire des Produits de Santé (AFSSAPS)* = the French Agency for the Safety of Health Products) (continued).

<table>
<thead>
<tr>
<th></th>
<th>Neonate 0-28 days</th>
<th>Infant 1 mth-2 yrs</th>
<th>Child 2 yrs-12 yrs</th>
<th>Adolescent 12 yrs-15 yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>&gt; 1 mth</td>
<td>&gt; 6 mths</td>
<td>&gt; 12 mths</td>
<td>&gt; 18 mths</td>
</tr>
<tr>
<td></td>
<td>&gt; 18 mths</td>
<td>&gt; 30 mths</td>
<td>&gt; 4 yrs</td>
<td>&gt; 7 yrs</td>
</tr>
</tbody>
</table>

*PO: *per os; IV: intravenous; I: injectable; †: drugs prescribed by hospital doctors and dispensed by hospital pharmacies only
MANAGEMENT OF ACUTE PAIN IN VARIOUS DISEASES (TABLES 7-10)

Table 7. Management of acute pain in surgery for procedures performed in a day hospital.

<table>
<thead>
<tr>
<th>Surgical procedure</th>
<th>First choice of treatment: Analgesic category and duration</th>
<th>Second choice of treatment (if first choice is inadequate: VAS &gt; 3 or no return to baseline activities after one or two doses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tonsillectomy</td>
<td>Level 2* for 72 hours</td>
<td>Level 3</td>
</tr>
<tr>
<td>Adenoidectomy</td>
<td>Level 1 for 24 hours</td>
<td>Further consultation</td>
</tr>
<tr>
<td>Circumcision</td>
<td>Level 2* for 72 hours and local lidocaine</td>
<td>Level 3</td>
</tr>
<tr>
<td>Undescended testicle repair</td>
<td>Level 1 for 72 hours</td>
<td>Level 2*</td>
</tr>
<tr>
<td>Inguinal hernia</td>
<td>Level 1 for 72 hours</td>
<td>Level 2*</td>
</tr>
<tr>
<td>Surgery for strabismus</td>
<td>Level 1 for 24-48 hours</td>
<td>Level 2*</td>
</tr>
<tr>
<td>Extraction of milk teeth</td>
<td>No analgesia</td>
<td>Level 1</td>
</tr>
<tr>
<td>Extraction of permanent or wisdom teeth, and/or germectomy</td>
<td>Level 1 for 48 hours</td>
<td>Level 2*</td>
</tr>
</tbody>
</table>

*: If codeine is used, it should be combined with a Level 1 drug.

Table 8. Management of acute pain in fractures and burns.

<table>
<thead>
<tr>
<th>Condition</th>
<th>First choice of treatment</th>
<th>Second choice of treatment (if first choice is inadequate: VAS &gt; 3 or no return to original level of activity)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-displaced fracture</td>
<td>Immobilisation ± Level 2</td>
<td>If pain persists after immobilisation, Level 3</td>
</tr>
<tr>
<td>Displaced fracture</td>
<td>Level 3 before and after immobilisation</td>
<td>Increase in dose</td>
</tr>
<tr>
<td>Fracture reduction</td>
<td>General anaesthesia</td>
<td></td>
</tr>
<tr>
<td>Superficial and local burn</td>
<td>Level 2 (as soon as the treating doctor has arrived)</td>
<td>Sustained-release oral morphine and intermediate doses of rapid onset oral morphine</td>
</tr>
<tr>
<td>Deep or extensive burn</td>
<td>Oral morphine as soon as the treating doctor has arrived</td>
<td>Morphine IV or immediate-release oral then, if pain is stabilised, sustained-release morphine ± intermediate doses of rapid onset oral morphine +/- NSAID</td>
</tr>
<tr>
<td>Dressings for burns</td>
<td>MEOPA +/- loading dose of morphine +/- anxiolytic</td>
<td>Deep sedation or general anaesthesia</td>
</tr>
</tbody>
</table>
### Table 9. Management of acute pain in medical conditions

<table>
<thead>
<tr>
<th>Disease</th>
<th>&lt; 6 months</th>
<th>6 months-1 year</th>
<th>1 year-6 years</th>
<th>&gt; 6 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>OTITIS</td>
<td>OPINION OF ENT SPECIALIST</td>
<td>Level 1 + local analgesics if eardrum is intact</td>
<td>Level 1 alone</td>
<td>VAS &lt; 5/10</td>
</tr>
<tr>
<td></td>
<td>If this fails *</td>
<td>Then (NSAID + paracetamol) for 48 h + local analgesics, if eardrum is intact</td>
<td>If this fails * Add codeine</td>
<td>Level 1 + 48 hours + local analgesics, if eardrum is intact</td>
</tr>
<tr>
<td></td>
<td>NSAID + Paracetamol</td>
<td>If this fails * Add codeine</td>
<td>If this fails * Add codeine</td>
<td>VAS &gt; 5/10 Level 1 + codeine</td>
</tr>
<tr>
<td></td>
<td>If this fails *</td>
<td>If this fails * Add codeine</td>
<td>If this fails * Add codeine</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Level 1 for 48 hours + local analgesics, if eardrum is intact</td>
<td>If this fails * Add codeine</td>
<td>If this fails * Add codeine</td>
<td>Increase doses to maximum allowed</td>
</tr>
<tr>
<td></td>
<td>VAS &gt; 5/10</td>
<td>Increase doses to maximum allowed</td>
<td>Increase doses to maximum allowed</td>
<td></td>
</tr>
<tr>
<td>DYSPHAGIA</td>
<td>Level 1 alone then in combination</td>
<td>Level 1 alone then in combination (NSAID + paracetamol)</td>
<td>VAS &lt; 5/10</td>
<td>VAS &lt; 5/10 Level 1 for 48 hours</td>
</tr>
<tr>
<td></td>
<td>If this fails *</td>
<td>If this fails * Add codeine</td>
<td>If this fails * Add codeine</td>
<td>Level 1 + codeine</td>
</tr>
<tr>
<td></td>
<td>Increase doses up to maximum allowed</td>
<td>Increase doses up to maximum allowed</td>
<td>Increase doses up to maximum allowed</td>
<td></td>
</tr>
<tr>
<td>GINGIVITIS - STOMATITIS</td>
<td>Level 1 (but usually inadequate)</td>
<td>Level 2 routinely for 48 hours + lidocaine gel on the lips only 2 mg/kg every 3 hours (maximum 100 mg/dose)</td>
<td>VAS &gt; 5/10</td>
<td>VAS &gt; 5/10 Level 1 for 48 hours</td>
</tr>
<tr>
<td></td>
<td>If this fails *</td>
<td>If this fails * Morphine</td>
<td>If this fails * Morphine</td>
<td>Level 1 + codeine</td>
</tr>
<tr>
<td></td>
<td>Morphine</td>
<td>If this fails * Morphine</td>
<td>If this fails * Morphine</td>
<td></td>
</tr>
</tbody>
</table>

*: Failure: For children over 6 years able to complete a VAS, failure is defined after one or two doses of analgesics as: VAS not reduced to 3/10 or lower or no decrease in VAS. (For children under 6 years, we define failure as persistent disappearance of the child’s basic activities, i.e.: moving, playing, sleeping, talking, eating).
### Table 10. Management of acute pain caused by care

<table>
<thead>
<tr>
<th>Care procedure</th>
<th>First choice of treatment</th>
<th>Second choice of treatment</th>
</tr>
</thead>
</table>
| Venepuncture                    | EMLA* for children under 11 years and those who ask for it (grade A)                      | MEOPA† combined with EMLA for children who are hard to inject or who are afraid of the procedure  
  Sedation in the event of failure of EMLA + MEOPA |
| Vaccination, subcutaneous       | Routine EMLA for repeated injections                                                      | EMLA as required for occasional injections                                                 |
| injections                      | EMLA as required for occasional injections                                                 |                                                                                           |
| Intradermal reaction            | EMLA                                                                                      |                                                                                           |
| Sutures                         | MEOPA followed by local anaesthesia with injectable buffered lidocaine (9 ml of lidocaine for 1 ml of 88 mEq/100ml) | Sedation or general anaesthesia                                                           |
| Lumbar puncture                 | MEOPA and/or EMLA                                                                         |                                                                                           |
| Myelograms                      | MEOPA and EMLA                                                                             | Sedation or general anaesthesia                                                           |
| Paracentesis                    | MEOPA for children over 6 months                                                          | General anaesthesia                                                                       |
| Retraction of the foreskin      | Lidocaine gel and MEOPA                                                                    | Sedation or general anaesthesia                                                           |
| Verruca removal                 | Injectable lidocaine (grade A) and/or MEOPA                                                | Sedation or general anaesthesia                                                           |

* EMLA: anaesthetic cream, a mixture of lidocaine and prilocaine.
† MEOPA: equimolar mixture of oxygen and nitrogen protoxide