

One of the most distressing aspects of children with arachnoiditis must be the constant battle against pain.

As I explained in a previous article, pain relief in children has not always been at the forefront of the medical arena.

In 1994, Walco et al published a paper in the prestigious New England Journal of Medicine ([1](#)) on the subject of the ethics involved in treating pain in children. The authors noted "an incongruity between what is available technologically and what is practiced clinically", citing reasons such as

"incorrect assumptions about pain and its management, individual and social attitudes toward pain, the complexity of assessing pain in children, and inadequate research and training".

It seems unconscionable that until fairly recently medicine contained myths such as the notion that very young infants are insufficiently neurologically developed to experience pain. Of course, this particular myth has been dispelled by neuroanatomical research.

Other ideas include the belief that young children will have no memory of pain and that it thus has no lasting effect. Again, this has been discredited by evidence that shows that early experiences of pain may produce permanent reorganization of neural pathways, which may affect future experiences of pain.

Walco and colleagues further tackled the idea that children's pain cannot be measured accurately. In fact, children are very accurate reporters from around the age of 5. Any discrepancies between the child's version and the observation by doctors or parents may well

be better discounted and the child's viewpoint deferred to.

The Walco paper clearly states,

“Denial of relief from pain that is proportionate to the expressed need for such relief must be judged an unjustified harm, unless such deprivation serves a substantially greater good.”

The authors cite the established standards for pain management of The Joint Commission on Accreditation of Healthcare Organizations ([\[2\]](#)) suggesting that if these standards are to be met, multidisciplinary teams need to develop specific treatment protocols for children's pain.

Of course, as the article remarks, pressure from parents and the legal community may be a strong determinant of future clinical practice.

It is therefore important for parents to have a clear understanding of the nature of pain and how it can affect their child, not only physically but also emotionally and behaviourally.

Measuring pain in children:

There are 3 basic ways to find out how much pain a child is experiencing:

1. What the child says
2. What the child does

3. How the child's body is reacting

1. What the child says:

Asking the child how much he/she hurts is one of the best ways to measure pain, because only the child knows how bad the pain is.

Of course, it is vital to tailor the questions according to the age and level of understanding of the child; for instance, a child under 4 may be able to say he/she is in pain but not how much pain they feel.

For children over 4 in America, the Poker Chip method is used: children say how many 'pieces of hurt' they feel, one chip being 'just a little hurt' and each subsequent chip an increasing amount (the fourth chip being 'the most hurt you could have'); what the child says is then reflected back to him/her, e.g. the adult says 'Oh, that means you have a little hurt.'

For children over 5 years of age, drawing pain faces can be helpful. A scale with different faces is used, the child pointing to the relevant one. (After an initial training asking the child how he/she would feel following a minor pain such as a bump and how he/she would feel about a much more serious pain.

Once a child reaches 6 or 7, they can use words such as 'no pain', 'little pain', 'medium pain' or the 'most pain possible'. Children of this age are also often able to rate their pain on a 0-10 or 0-100 scale, where 0 is no pain and 10 (or 100) is the worst possible pain.

Children are less likely than adults to talk about pain.

2.What the child is doing:

There are obvious signs such as crying, grimacing or holding/rubbing/favouring the affected part, but these are not always completely reliable. Children may have pain and not show it. Brief, sharp pains may cause more changes in behaviour than constant pain lasting a few hours.

Ongoing pain may reduce the child's level of activity and may lead to avoidance tactics for activities that the child perceives as making the pain worse.

Alternatively, the child may simply enjoy the activity less and thus be less keen to participate or may express what seem surprising emotions such as anger about certain suggested activities.

Parents are very adept at realising when behaviour is modified by pain and when it is affected for other reasons.

3.How the child's body is reacting:

Changes in heart rate, skin pallor or flushing, sweating may be observable if the pain is acute, but are not always discernible in chronic pain.

Checklist for assessing adequacy of pain management in children:

Pharmacological treatment: have issues about pain relief (such as use of opiates: morphine-related drugs) been discussed? Is pain relief being given at appropriate dosage and frequency via a route that suits the needs of the child?

Are side effects being monitored and managed as necessary? Does the child feel pain relief is satisfactory? Do the parents/caregivers feel pain relief is satisfactory?

Other strategies: (e.g. hydrotherapy) are these appropriate for the child's developmental level, condition and type of pain? Is the timing appropriate for optimal effect? Is the strategy effective? Are there any negative aspects of the strategy? Is the child satisfied? Are the parents/caregivers satisfied?

Managing pain in children

Here is an introductory view on psychological ways of beating the impact of pain.

Parental behaviour:

(i) show confidence: children can tell how confident or otherwise you are in their pain management and parents' anxiety can transmit itself to the child quite readily; conversely, many children say that their parents are their greatest source of strength when dealing with pain. Parents who are feeling overwhelmed by their child's illness and the pain they think he/she has to endure may need to seek help to deal with this situation.

(ii) Give explanations that the child can understand: keep it simple; using a doll for younger children or diagrams for adolescents may be helpful in explaining what is happening to their body. Children generally need to know what is happening to them, and to feel that their parent can be open and honest with them; the unknown is more to be feared!

(iii) Individualise the approach: children vary enormously in how they react and things that may help one child will not help another.

(iv) Be honest: especially about procedures such as having blood taken: if it is going to hurt, don't pretend it won't, because the child will lose trust in you. But use suggestions to reduce the

pain: "yes, it may sting for a minute...but if you take a deep breath and count to 10, it may hurt less"

(v) give positive feedback: praise co-operative behaviour and ignore minor misbehaviour; a no-nonsense approach is best (even the most seriously ill children need boundaries) small rewards can help a child with unpleasant procedures (changing dressings etc.); effort must be rewarded as much as achievement.

(vi) Never use medical procedures as a threat (vii) give some control to the child: even very young children can be given choices, such as whether to sit on your lap or a chair, which finger to have pricked, whether to have a plaster.

Child behaviour

(i) Use play: play is an essential part of any child's life and even quite sick children can still play.

(ii) Use relaxation and imagery to reduce anxiety and tension, which make pain worse, and medical procedures harder to perform. Anxiety reduces the benefit of rest and sleep, tiring the child and making coping with pain more difficult.

Different forms of relaxation suit different ages: babies relax when rocked, stroked or cuddled; toddlers may enjoy a cuddle but also relax when being read a story or listening to a favourite song; school-aged children enjoy cuddles and maybe a gentle massage; children over 10 may be able learn formal relaxation techniques and may find imagery helpful (recalling a favoured activity for example); most teenagers can easily learn formal muscle relaxation and deep breathing techniques.

(iii) Distraction: with conversation, music or TV can be helpful for older children, but even babies can momentarily be distracted by toys and other colourful objects or sounds.

(iv) Teach 'self talk', in other words, telling yourself things like 'This'll soon be over' or 'It's tough but I'm doing well'; using this sort of self talk can have a calming effect; children over 6 can learn it; whereas adolescents may be able to work with something more sophisticated: ADAPT, which is a way of transforming thoughts from negative to more positive. *

(v) Teach problem solving: older children and adolescents can learn what makes their pain better or worse; using rating scales and looking at previous ratings, children can work with parents/nursing staff; brainstorming can be used to find new ideas to combat the pain.

*ADAPT:

Acknowledge negative thought

Describe what makes it negative

Assess if thoughts are helpful

Present alternatives

Think praise for yourself for a better way of thinking

Summary:

Infants 0-1 year: Rocking, stroking, patting, use of soother, food, distraction, music, soothing talk, new or favourite toy.

Toddler 1-3 years: Rocking, stroking, patting, use of food, distraction, music, soothing,

self-talk, favourite stories read by parent or on tape.

Preschool and School-aged: Self talk, relaxation exercises, control, distraction, music or stories on tape.

Adolescent: Problem solving, self talk, relaxation exercises, control.

Note that the recent Cochrane Review on psychological therapies for the management of chronic and recurrent pain in children and adolescents ([\[3\]](#)) concluded that whilst therapies such as relaxation and cognitive behavioural therapy are effective in reducing severity and frequency of chronic headache, there is no evidence as yet for psychological therapies effectiveness in other types of pain and little evidence that this type of therapy is helpful with non-pain outcomes.

[\[1\]](#) Walco GA, Cassidy RC, Schechter NL. The ethics of pain control in infants and children. N Engl J Med 1994; 331 (8): 541-544.

[\[2\]](#) Accreditation manual for hospitals, 1994. Oakbrook Terrace, Ill.: Joint Commission on Accreditation of Healthcare Organizations, 1993.

[\[3\]](#) Eccleston C, Yorke L, Morley S, Williams AC, Mastroiannopoulou K Cochrane Database Syst Rev 2003; (1): CD003968