

How to become a P.I.

Pain Investigator into Childhood Pain

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While every effort has been made to ensure that the information contained in this book is based on scientific evidence and verified, the author shall not be held responsible or in any way liable for any consequences arising from using the information contained in this book.

This book is NOT intended to replace a medical visit. If you are concerned about the physical well-being of a child, please visit your doctor or clinic as soon as possible!

This book is dedicated to my two children,
Francois and Rhodene.

I'm learning so much from you,
and you are always cheering me on!

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Introduction

When you're on holiday, driving along in your car, the last thing you want to see is a red warning light, flashing on the dashboard. But that does not mean that you can ignore it. Well sure, you could – but then you'll have to accept the fact that you are probably going to be stuck in the middle of nowhere with an empty fuel tank or with an overheated car.

Warning lights are there for a reason. And so is pain. Pain is the warning system of the body, telling you that there is a problem somewhere in your body. In our society today, there is a trend to treat the symptom of pain as soon and as effectively as possible in order to carry on with the normal activities of daily living. However, pain is there for a reason, and we need to identify the cause of the pain before we can treat it. Sometimes it simply means that a part of your body has been overused and now needs to rest. At other times, it may be something more serious.

In the same way, warning lights on a car's dashboard can sometimes be more serious than at other times. If you see the light flashing, indicating that you have an empty fuel tank, you might still be able to travel for about 40 – 50 km before you need to fill up. However, if your car is overheating, you should probably pull off the road immediately before some serious damage is done to the engine. The same goes for pain. Sometimes it is important to react immediately when you have pain, while at other times you can wait a bit.

When it comes to children, it might be very difficult to distinguish between serious pain and the not-so-serious aches and complaints of children. To complicate matters even more, the experience of pain can be influenced by numerous factors.

One day, many years ago, a little girl was sitting all on her own on a horizontal pipe between two taps, watching her friends play on the school's playground. Casually swinging her legs, she tried her best to pretend that she didn't mind sitting all alone. Suddenly, her grip on the pipe slipped and she swung backwards, hitting her head on the pavement below the taps. No real damage was done and there wasn't even any blood, but years later, that fall in

Grade Two was always the first memory that came to mind when she thought about a painful experience. The embarrassment that went with the pain just made the pain experience even more excruciating.

As Leora Kuttner puts it, '*the strain of pain lies solely in the brain*'¹. It can actually be said that pain is more *perception* than it is a *sensation*.

An American surgeon, who accompanied the troops to Europe during World War II, described how the soldiers reported much less pain than people with similar wounds he had treated back home. He concluded that the soldiers gave a different meaning to pain. In the first place, a war wound was something to be proud of. But not only that – the pain that they experienced meant that they were alive and the injury was a ticket home.²

I am sure that you've also experienced some unexplained bruises on your body from time to time. The dark blue colouring on your skin was clear evidence of something that must have hit you hard, but you simply couldn't remember when that incident occurred. Chances are that you've been so distracted by a different activity that you never felt the (rather painful) knock against your body. Now just imagine if you were standing at a cocktail party and your enemy walked up to you and deliberately bumped into you – that would immediately be very painful, wouldn't it? Even though you probably won't have any bruises to show afterwards.

It is therefore clear that pain is not equal to the severity of the injury suffered by the body. Several factors influence the experience of pain and, even today, certain aspects of pain are still a mystery. It is therefore very difficult to know what to do when your own child or a child in your care has pain. You don't want to over-react and go to the doctor every time a child is complaining of pain, but you certainly don't want to ignore important warning signs when something might be seriously wrong.

This book will prepare you to become a PI – Pain Investigator! You will be able to solve some of the mysteries of childhood pain, and you will also get the right tools to handle painful experiences. But first, we're going to explore the

1 Kuttner, L. 2010. *A Child in Pain: What Health Professionals Can Do to Help*. Bethel: Crown House Publishing Limited.

2 Beecher, H.K. 1956. Relationship of significance of wound to pain experienced. *Journal of the American Medical Association*, 161: 1609-1613.

mystery of pain as this is crucial in understanding pain, and forms the basis of all further discussions in this book.

Oh, and by the way, don't worry about the lonely little girl from the second grade. She grew up to be quite a well-adjusted adult, despite (maybe even because of) the short period of rejection she experienced many years ago. I know, because I was that little girl. Trials and tribulations can often serve to make us stronger. However, the same can never be said about physical pain...

CHAPTER 1

The mystery of pain

I like watching movies or reading books about private investigators, trying to find all sorts of evidence, deciphering complicated codes and piecing it together to reach a conclusion. However, before anyone can become an investigator, they must learn how to decipher codes and solve mysteries.

Pain is just like a coded mystery, and in this chapter we're going to explore the mystery of pain so that we can understand what we're dealing with, before we can look at ways to decipher the pain code.

Defining pain

The International Association for the Study of Pain describes pain as: *'an unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage'*³.

Let's break down this definition:

- ▶ Pain is unpleasant and distressing and can even be devastating for children.
- ▶ Pain is not only experienced through your senses, but your emotions are also involved. Different emotions can cause you to experience either more or less pain.
- ▶ Pain might be linked to some damage to your body, but the pain is not always equal to the amount of tissue damage or injury in the body. You can even experience pain if you are convinced that there is damage, even in the absence of real damage.
- ▶ We tend to associate and describe pain according to suspected damage to our bodies. Say, for example, you experience severe pain in your ankle. It is very likely that you will form a picture in your mind about what went

3 International Association for the Study of Pain: www.iasp-pain.org

wrong inside your ankle and you might say something like, *'It feels as if my ankle is broken'*.

Many years ago, McCaffery formulated another definition of pain that is still referred to today: *'Pain is whatever the experiencing person says it is, existing whenever the experiencing person say it does'*⁴. This is also true where children are concerned. Adults often think that children are just looking for attention when they say they have pain, but did you know that children are better at hiding their pain than at faking it? We must believe children when they say they have pain. And even in the rare circumstance that there might not be physical pain, the child is still trying to tell us that something is wrong, and asking for help in the only way that he/she is capable of at that stage.

There are mainly two kinds of pain, acute pain and chronic pain:

Acute pain is the pain we are all familiar with. It is the direct result of some form of injury to the body and serves as the body's alarm system, thereby protecting your body from harm. If you are trying to open a bottle with a tight lid, the pain impulse in your hand will stop you at some stage before you hurt yourself when you keep on trying. In the same way, the pain in your leg after a fall will alert you to the fact that you have a broken leg, and will prevent you from walking on the injured leg and causing more damage.

Chronic pain, however, can carry on long after the initial problem has been sorted out. Because there is often not a medical diagnosis that can explain the pain, it is seen as a diagnosis in itself, and not merely a symptom of another medical diagnosis, as is the case with acute pain. It is like the warning light on your car's dashboard that doesn't want to go off. You did fill the tank with fuel, but something went wrong in the wiring of the car and the light keeps on flashing, even though there is no problem any more. You are not imagining the flashing light – it is real. In the same way it is important to remember that a person experiencing chronic pain is

4 McCaffery, M. 1968. Nursing practice theories related to cognition, bodily pain, and man-environment interactions. Los Angeles: University of California at Los Angeles Students' Store.

really experiencing it, even though the cause of the pain is not obvious to others. Pain nerves are sending faulty but very real messages to the brain, but unfortunately it is not so easy to rewire the nerves in a person's body as it is to rewire a car!

The most common chronic pain that children usually experience are headaches, stomach pain and muscle- and joint pains, or pain that lingers after an initial injury or surgery has healed. Sometimes there may be an underlying cause, as discussed later in this book, but at other times no cause can be identified, and the focus then moves to learning to cope with the pain. It is best to contact a professional specialising in chronic pain to assist the child to cope with the pain and to live an active life despite the pain.

Pain messengers in the body

Nerves are like roads, carrying messages from the far corners of the body to the brain, where these messages must be interpreted first before we can experience pain. Note that you have a protective function built into your system. When, for instance, you touch a hot plate, you will instinctively jerk back your hand due to a reflex action. This is possible because the pain impulse in this instance does not even go further than your spinal cord and doesn't need to be interpreted by your brain first. However, all other pain messages must go to the brain first, but they don't all travel along the same road. **See Figure 1.** Just as there are highways and back roads on which we can travel by car, there are different kinds of nerves in your body, responsible for different kinds of pain experiences:

- ▶ **The highways** (A-delta fibres): nerves that allow messages to travel quickly from one end to the other and which are responsible for sharp and brief pain experiences – usually the first pain that we feel after an injury.
- ▶ **The smaller city roads** (C fibres): effective but much slower than the highways. These nerves are responsible for a burning, aching kind of pain that lasts longer – sometimes even after the initial pain stimulus has ended – and plays an important role in how much pain you experience.

- ▶ **The country roads (A-beta fibres):** can be as fast as the highways, but you'll find all kinds of traffic here – from donkey carts to tractors to bicycles and even cars going way faster than the speed limit. These nerves don't usually carry pain impulses but specialise in other messages from the senses, such as pressure, touch, vibrations, heat and cold.



Figure 1. Pain messages in the body

The different kinds of nerves all go in the general direction of the brain through the spine. If all the nerves carry messages at the same time, this might cause a traffic jam in the spinal area. Fortunately for us, our bodies have a traffic controller on duty who acts as a gatekeeper and controls which messages can go through and which not. This is called the *Gate Control Theory of Pain*⁵.

If you bump your elbow, you instinctively start rubbing it because it helps for the pain. This is not 'all in the mind', but rather because of the traffic controller in your spine. The sensation of you rubbing your elbow goes through to the brain, while the pain impulse is temporarily blocked in the spine.

When the pain impulse gets to the brain, it must go through a roadblock first where it is screened. This is done by the limbic system or emotional part in your brain, where your reaction towards the pain is influenced by emotions such as pleasure, anger, sadness and fear. Fortunately (or maybe unfortunately, depending on the situation) your limbic system is pretty biased, and the screening of the pain impulse is therefore influenced by the current emotional state of your body. The limbic system links the impulse to previous experiences that you've had, your cultural upbringing, as well as the degree of damage that you think your body is experiencing, and the meaning that you give to the pain. All these factors influence how you perceive the pain impulse. Only after the impulse is screened at the roadblock, is it sent to the cortex of the brain where it is processed so that you can become aware and act according to the impulse.

Your brain will also send another message back to the traffic controller in your spine, which then either blocks more pain impulses from coming through (resulting in a reduced feeling of pain) or allows and even encourages these pain impulses to go through to the brain (thus you'll experience more pain).

Another mechanism influencing the pain impulses going to your brain is a substance called *endorphins*. This substance was discovered years ago when scientists did some research on morphine addiction and discovered that our bodies can produce a substance similar to morphine. Endorphins will help the traffic controller in your spine to block the pain impulses going through to the brain. When we do something that is fun, when we relax and listen to music

5 The Gate Control Theory of Pain was proposed by Ronald Melzack and Patrick Wall in 1965, but is still relevant today.

and even when we exercise, the endorphin levels in our bodies increase and will help us to experience less pain.

All of these mechanisms explain why emotions such as fear and anxiety can increase your pain experience, whereas when you feel safe and happy, you will experience less pain. It is therefore important to always help children feel safe. If children experience a strange situation and they are not sure how to react, they tend to look to the adults around them for cues on how to react to a given situation. If you are relaxed and calm, you can help children to feel calm as well so that they will be able to cope better with the situation. If they are then subjected to pain, such as a medical procedure, the experience will also be less intense.

It is therefore clear that the pain impulse can be influenced and adjusted at different levels when travelling through the body, and it is important to remember this when we later discuss how to set boundaries for pain.

Referred pain

Although pain can start at different areas in our bodies, the pain impulse travels the last part of the journey towards the brain on the same route as pain from nearby tissue. This fact can sometimes confuse the brain, which will then interpret the signal as coming from the nearby tissue. The experience is called 'referred pain' and often happens if the pain originates from the organs deep inside our bodies but is then interpreted as superficial pain. Examples are when pain in the lungs is experienced around the neck area; when problems with the intestines present themselves as pain between the shoulder blades, or when kidney problems are experienced as lower back pain or pain in the groin area. As it is, children often find it difficult to describe where they experience pain, and referred pain can complicate matters even more.

Different kinds of pain experiences

Different areas in the body are programmed for different experiences. Your skin can be stretched quite a lot without any pain, but if some air is trapped in your intestines, causing it to stretch just a little bit, it can cause severe pain.

However, if your skin receives a small cut, it can be very sore, while at the same time your intestines are not so aware of cutting injuries. For this reason, the pain experienced after an abdominal operation will come from the skin and muscles being cut, but not so much from the internal organs that were operated on.

How do children understand pain?

Children younger than seven years find it difficult to distinguish between the cause and effect of pain, and they usually see any pain or suffering as punishment for something they did wrong. For this reason, it is very important never to threaten children with an injection or any other medical experience, as this will just confirm the idea that they are being punished when they have to go to the hospital or doctor's rooms.

It could also be that they blame someone else for the pain, or they have some misconceptions about why they experience pain. Young children can also assume that their carers should know everything, and they might think that the adult will know they have pain, what the pain feels like, as well as where it is located. They might even get irritated when they are being probed with questions to find out something – that they believe – you already know.

Children are only capable of concrete or literal thoughts, and only start to develop abstract thinking around the age of ten. It is therefore very difficult for young children to understand the abstract concept of pain, and often not easy for them to pinpoint the area where it hurts, if they can't see the injury. A little girl may feel pain in her stomach, but because it doesn't make sense to her as there is no visible injury, she might point to her elbow where there is an old scab, because that is where she can see the injury. In the same way, children with multiple injuries would often be more upset by the blood on the knee and will not point out the pain in the broken arm.

Children under the age of seven also tend to generalize. For instance, they may become afraid of anyone wearing a dark blue uniform if they've received an injection from a nurse in such a uniform.

From seven years of age onwards, children's awareness of the body and internal organs start to increase, and the fear of bodily harm has a strong

influence on pain perception. Because they understand their bodies better, they may cooperate better if they understand the reason for everything that is being done to them. They are also more capable of specifying the location of pain in their bodies than a younger child.

As mentioned earlier, children are much better at hiding their pain than at faking it. Children sometimes don't want to let you know that they are in pain, and this may be due to the following:

- ▶ They might be embarrassed by the pain experience – children often think that others will regard them as 'a sissy' if they admit that they have pain.
- ▶ They could assume that the pain will indicate that they did something wrong.
- ▶ They are afraid of getting an injection or bad-tasting medicine for the pain.
- ▶ They believe that nothing can be done about the pain in any way.
- ▶ They don't know how to tell other people about it.

From personal experience

When my five-year-old daughter fell from the jungle gym in our backyard and broke her arm, she didn't complain of pain at first. Her friends told me that she had a fall but she insisted that she was okay. She looked fine and the arm wasn't misplaced, so I didn't realise that there was a problem. It was only after her friends had left that she started to cry and complain about pain in her arm.

There might be several reasons why she didn't complain of pain straight away:

She was still in shock from the fall and didn't feel the pain.

She was embarrassed by the fall in front of her friends and didn't want to admit that she was in pain.

She had always been a bit adventurous and according to her friends, she was trying to get onto the roof of the house from the gym, when she had the fall. She knew what she had done was wrong, and kept quiet because she felt guilty.

How to explain *pain* to a child

It is difficult for children to talk about something if they don't understand it. Any discussion about pain should start with an explanation. When talking to children about pain, remember to use the word for pain that the child is familiar with, such as '*hurt*', '*ouch*' or '*eina*', and include the following aspects in your explanation:

- ▶ Pain is a feeling and the child did not do anything wrong. You can say something like this:
'You know how we can feel if something is hot or cold, or tickling? We call that "feelings". Hurt is just like that, it is a feeling. You don't hurt because you were naughty or did anything wrong. A part in your body is not working the way it should be, and your body is telling you that something is not right. You can help me so that we can figure out what is not right in your body, so that we can fix it.'
- ▶ Pain can be in different parts of the body. Explain to the child that pain can be felt anywhere in the body, even if it is not possible to see the hurt, as it can hide somewhere deep inside the body. Tell the child that he/she has an important job to tell you exactly where the pain is.
- ▶ The pain can sometimes be more intense than at other times. Explain to the child that sometimes only a little bit of pain can be felt, while at other times a lot of pain can be felt. Use examples that the child is familiar with, such as brushing hair versus falling down really hard.
- ▶ Describe how there are different kinds of pain. The descriptions of pain can vary greatly between cultures and even between families in the same culture. Remember to use the same words and/or descriptions that the child is familiar with. You can mention the following kinds of pain:
 - A dull, aching kind of pain that stays the same the whole time.
 - Pain that gets worse at times and then better, like a cramping kind of pain.
 - The throbbing kind of pain that feels like someone is playing a drum inside your body.
 - A sharp pain that feels like there is a fire burning inside your body.

- ▶ Explain that pain can also have a positive effect. It serves as a signal for the good soldiers in the body so that they know where to find the painful area in order to start fixing the pain. However, this explanation is intended for children as a reassurance and should never be used as an excuse not to address the child's pain.

Why should we address pain in children?

Children can easily be traumatised by a painful experience. The stress and anxiety that children experience during, after or in anticipation of a painful experience, often manifest in other symptoms, such as nausea and vomiting, nightmares or even skin rashes. If children experience ongoing pain, it can also lead to fatigue, depression and feelings of hopelessness.

A common misconception is that children will become stronger because of pain. However, this has never been confirmed by any research. In fact, it was found that when babies and small children experience a lot of pain, they can become very sensitive to pain in later years⁶. Just as frequent travellers through a grass field can create a clear footpath, pain can also carve out a route that can be easier to travel the next time. If babies and children are repeatedly exposed to pain, they tend to experience subsequent pain more quickly, more intensely and they are not able to tolerate pain very well. Pain also causes the secretion of stress hormones in the body, which in turn can put pressure on the immune system and can even delay the recovery of the body in some instances.

So now you have all the background information you need to become a Pain Investigator. Let's have a look in the next chapter at the tools you'll need for the job.

6 Schechter, N.L., Berde, C.B. & Yaster, M. 2003. Pain in infants, children and adolescents: An overview. In Pain in infants, children and adolescents. 2nd edition. Edited by Schechter, N.L., Berde, C.B. & Yaster, M. Philadelphia: Lippincott Williams & Wilkins.

CHAPTER 2

Becoming a Pain Investigator

Before dealing with pain, you must detect it first. As mentioned earlier, children often deny pain for various reasons, which makes it even more difficult to detect their pain. While acute pain might cause a distinct reaction, longer lasting pain may instead cause behaviour problems that are not always easy to trace back to pain. Just as an investigator uses different tools to help with an investigation, you can also apply a variety of tools to investigate a child's pain. No one tool is more important than the others, and you must use all the tools to ensure that you do a thorough investigation.

In babies and small children, you will only be able to use the first two tools. It is often a daunting task, even for professionals, to detect pain in these little ones. It is therefore important not to hesitate to take a baby or small child to the doctor if you're concerned.

Keep in mind that each child is unique and reacts in his/her own way to pain. Their reaction might be influenced by numerous factors, such as developmental age, personality and previous experience with pain, as well as their current understanding of the event causing the pain. Even the same child in a different situation can react differently to pain.

Tool 1: Listening device

The first tool that you'll have to use is to listen very carefully to what children are saying, how they are saying it and the way in which they express themselves through their crying.

We all assume that, when children experience pain, they will start yelling at the top of their voice and tell us immediately and in so many words that they are in pain. However, this is not always the case. As mentioned in the previous chapter, children can keep quiet because they



don't want you to know that they are in pain. They might be embarrassed by the pain experience, assume that the pain will indicate that they did something wrong, afraid of getting an injection or bad-tasting medicine for the pain, or they might not know how to talk about the pain, or believe that nothing can be done about the pain in any way. If they experience severe pain, they can even keep quiet because the mere act of taking deep breaths and complaining causes more pain. If the pain is the direct cause of a traumatic event or associated with such an event, children might not talk about it simply because they are numb from the shock. Also listen for indirect cues, such as complaining more than usual about other issues, or crying for no apparent reason.

Children usually have a specific word that they've learned to describe pain. It is important that caretakers and everyone involved with the child know what word he/she uses to describe pain, otherwise pain might go undetected in some instances. While we're on the topic, let me remind you that it might not be a good idea to encourage an unfamiliar word to describe pain just because it sounds cute when your child says it.

A child's crying usually sounds different when in pain, but all children are unique, and it might often be an overwhelming task to try and figure out why a child is crying, especially if it is a newborn or a child you're not familiar with. Fortunately, small babies will not deny pain and they will at least let you know that something is wrong. Observing a baby closely might just tell you what is wrong. Our first impulse is usually to silence a crying baby. However, we should learn to listen intently to the crying of a baby to determine the cause so that we can act on the problem before we hush the child. Babies cry for different reasons and their crying differs according to the reason why they are crying. A baby in pain will be difficult to console and may push you away. The crying is usually intense and not just a whimpering.

Here are some other reasons (besides pain) that might cause babies to cry:

- ▶ Feeling uncomfortable, such as when they have a wet nappy or when they are too cold or too hot.
- ▶ Hunger.
- ▶ Tiredness or over-stimulation.
- ▶ Feeling afraid.

- ▶ When they need your love and attention.
- ▶ To give expression of their frustrations and to release stress.

Tool 2: Magnifying glass

You will be able to get a lot of information just by looking at the child. This is also the main tool that you will be using to detect pain in a child younger than two-and-a-half years.



When children are in pain, they may present with some of the following symptoms:

- ▶ tight fists
- ▶ aggressive and/or irritable
- ▶ gnashing of teeth or grimace
- ▶ lying curled up in the foetal position
- ▶ toes curling upwards or pressing down
- ▶ banging his/her head against an object
- ▶ hyperactive or unusually quiet and withdrawn
- ▶ the whole body can become tense and restless
- ▶ trying to protect the area that is sore, by limping or not allowing anyone near the area
- ▶ loss of appetite (however, this is not always true of small babies as they have a natural tendency to start sucking when they are in pain)
- ▶ facial expression of a baby will reveal a bulging brow, frowning, eyes closed, open mouth, deepening of the skin folds running from the nose to the mouth and a stiff tongue.
- ▶ drooling may indicate that the child doesn't want to swallow because of a sore throat
- ▶ excessive clinging and dependency on primary caregiver
- ▶ disrupted or reduced sleeping patterns
- ▶ rubbing or clutching the painful area
- ▶ quick and shallow breaths
- ▶ sweating

Remember, not all symptoms are applicable in every situation and it might even be that the child is showing just one or two of these symptoms.

Tool 3: The interview

This tool can only be used with children who are able to talk to you, and from about two to two-and-a-half years old. Talking to a child is a very important part of the assessment, but first of all the child needs to know that he/she can trust you.



How do I gain the trust of children?

The following guidelines can help you to increase the child's trust, or even to establish a trusting relationship with children that you are not very familiar with.

Always kneel or sit in front of children so that you are at their eyelevel and look them directly in the eyes. Mimic their facial expressions and body postures to show empathy and understanding. Light touches, such as putting your hand on a child's shoulder or knee, will also help you to connect with the child.

Be careful not to reassure children excessively. Telling children repeatedly that everything will be okay might have the opposite effect and rather communicate to them that right now, everything is **not** okay and, in fact, there are some very serious problems.

Believe children when they complain about pain, and never diminish their feelings, as they will find it more difficult to trust you next time and might not tell you when they experience pain in future. Acknowledge it when children complain about pain and provide hope, explaining what is going to be done to make the pain better. However, refrain from making false promises.

Start by explaining exactly what pain is as discussed in Chapter 1. Only after you've made sure that the child understands pain and knows how to express it, can you start asking about the pain. Make use of the various devices in the next section (Tool 4) to assist children in explaining their pain to you.

The following are important questions to ask about pain:

- ▶ **Where** is the pain?
- ▶ **How bad** is the pain?
- ▶ **What kind** of pain is it?
- ▶ **When** do you feel the pain? For example, the child might experience stomach cramps when eating something specific, or the pain gets worse when using his/her hand.
- ▶ **How long** has it been going on? Smaller children will not be able to answer this question as they will only acknowledge pain if they are experiencing it at the moment.

STAY CALM

Remember, children are very sensitive towards the emotions of the adults around them. If your child experiences pain of an unknown cause or has just had an accident, you will probably be distressed. You might even get upset at other people who may be responsible for your child getting hurt.

However, children might think that you are angry because they did something wrong. If you are very upset, be open about it and tell them that you are concerned because you don't like to see someone you love getting hurt. You are not angry with them and they didn't do anything wrong. Settle all disputes with other people away from your child.

Take deep breaths and focus on calming yourself first. Another tip that really works is to do some counting when you are very upset. When you are in a crisis situation, your body tries to protect you from further negative input by shutting down part of your brain that you need for thinking, limiting your ability to think rationally. If you do an exercise like counting to ten, you will not only be able to think more clearly about what to do in the crisis situation, but you will also be better able to support your child.

Tool 4: Various devices

There is a whole suitcase full of various devices that can be used to aid in investigating pain in children older than two-and-a-half years. Let's explore what they are:



► Drawings

You can ask children to draw the pain that they are experiencing. Because of their concrete thinking, young children mainly think in pictures and can be very creative in drawing their pain if asked to do so.

► Human outline or doll

Children find it difficult to pinpoint the exact location of pain, especially if there is no visible injury. It is less frightening and easier for a child to point out pain on a clear drawing of a human or even on a doll instead of on his/her own body.

► Pain scales

Different scales that can make pain a bit more concrete have been used successfully in healthcare to help children express the severity of the pain that they experience. These scales can be used from around the age of four or five years, and only if the child understands the concept of pain (as previously explained in the interview) and if he/she is not denying pain.

The scale that is used the most consists of different faces such as the ones depicted in **Figure 2** – from a smiling face (no pain) to a very sad face (worst pain ever) or even crying face. You can also download a Faces Pain Scale that has been validated through research from the website of the International Association for the Study of Pain⁷. As with any scale that we use in life, we must calibrate the scale for the child. Start by explaining the different faces and ask the child to think of a situation where they felt the worst pain ever. Then ask them to think of a time when they felt no pain at all. Finally ask them to describe the current pain by referring to one of the faces in the picture below.

7 www.iasp-pain.org



Figure 2. A pain scale using different faces

If you don't have a scale of faces with you, you can use a number line for older children from about 8 years old, where 0 depicts no pain and 10 maximum pain. You can even use five physical objects like pebbles or poker chips. Again, remember to calibrate the scale for children and explain to them that no pebbles/poker chips equal no pain, one pebble/poker chip means it hurts just a little bit and five pebbles/poker chips depict the worst pain ever.

► Pain diary

If a child frequently complains about pain, it might be helpful to keep a pain diary for a few days to determine exactly when and how often the child experiences pain. Draw up a table with time intervals and record the information below as applicable to the child's situation. This is a team effort, and everyone involved with the child should assist in gathering information. Remember to ask children about their pain even if they are playing and seemingly happy. Distraction works great for pain and is a very effective tool to use in order to manage pain, and sometimes children tend to distract themselves automatically by engaging in play or other activities. If you want to detect the scope of a child's pain, you will have to investigate the pain at regular intervals.

You can ask the child the following questions:

- Do you have pain?
- Where is the pain? (Use a human outline or doll)
- How bad is the pain? (Use a pain scale)
- What kind of pain is it? (Help the child to describe the pain as explained in the previous chapter)

Parents, caregivers and teachers can assist with the rest of the questions:

- Is something helping for the pain?
- Activity just before or when pain started.
- Other symptoms such as nausea, dizziness, visual disturbances, etc.
- Diet and fluid intake over the last 24 hours.
- Sleeping pattern over the last 24 hours – does it differ from previous days?
- Hours in front of the television and/or computer over the last 24 hours.
- Stressful situations occurring over the last 24 hours, or expected to happen in the next 24 hours.
- Does the pain influence daily activities and sleeping patterns?

Tool 5: Special forces – skills needed to detect pain in a child with special needs



Sometimes an investigator needs to get ‘special forces’, who have particular skills, involved in order to help solve the case. When a child has been diagnosed with an Autism Spectrum Disorder (ASD), Cerebral Palsy (CP) or is mentally and/or physically challenged and unable to communicate well, or maybe not communicating at all, special skills are sometimes needed to detect pain in these children.

Unfortunately, it is widely believed that a child with ASD doesn’t experience pain. However, this is not true. Because they sometimes cannot understand and/or give meaning to sensory experiences, they often tend to revert to behaviour where they hurt themselves, but this does not mean that they cannot feel pain. Research confirmed that children with ASD do experience pain. However, they tend to express their pain in a different way⁸. A medical environment can be overwhelming to these children, who are already sensitive

8 Rattaz, C., Dubois, A., Michelon, C., Viellard, M., Poinso, F. & Baghdadli, A. 2013. How do children with autism spectrum disorders express pain? A comparison with developmentally delayed and typically developing children. *Pain*, 154(10):2007-2013.

to strange smells, sights and sounds. This can add to their fear and anxiety, resulting in an increased experience of pain.

Children with CP often experience chronic pain from various underlying disorders, such as:

- ▶ Muscle and joint pain due to spasticity.
- ▶ Stomach pain from constipation, gastro-oesophageal reflux (acid moving up from the stomach), or other disorders of the digestive system.
- ▶ Skin breakdown from splints and other devices, or from repetitive movements.
- ▶ Headaches.
- ▶ Mouth sores and dental cavities.

Because this kind of pain usually goes on for a long time, the behaviour of the child is often seen as expected for that specific child, and the pain goes undetected. Children with a neurological disability often have a higher-pitched cry than other children, which makes it even more difficult to determine whether the crying is from pain or from something else.

The biggest stumbling block to overcome, is first to acknowledge that these children can and do feel pain. However, the way they express their pain might not be what you expect, and you need to look very closely in order to detect any signs of pain. This is not an easy task, but over time you will be able to detect some of the signs indicating that the child is in pain.

Listen for a certain kind of crying, screaming, groaning or repeating of certain syllables such as 'ty-ty-ty' or 'la-la-la'. Alternatively, the child may become very quiet and withdrawn. Changes in eating and sleeping behaviours can also be an indication of pain. Look out for restless body movements that become worse at times when pain is expected, such as rocking or swinging of arms and legs, and even self-injurious behaviour such as head-banging. Facial expressions, for instance a furrowed brow, closed eyes, flaring nostrils and/or a grimace, may also indicate that a child is in pain.

If you suspect pain, examine the child to see if you can identify any reason for the pain, such as red marks where a splint is pressing on a limb or any other bruises. You can also give the child some pain medication to see if there is a

change in these signs, as this should give you an indication whether the child is in pain. Always consult your doctor or pharmacist before giving any medication to a child.

To help with identifying pain in these children, the 'Individualized Numeric Rating Scale'⁹ was developed to assist parents and caregivers in creating a pain scale for their individual child. On a scale from 0 – 10, where 0 is no pain and 10 is the worst pain ever, you can fill in behaviour that you think the child is expressing when he/she experiences that level of pain. It might look something like **Table 1** below but please note that this is only an example, and you need to identify your own child's reactions.



Number	Indication	Behaviour
0	No pain	<i>Flailing arms and legs</i>
1		
2		<i>Vigorously flailing arms and legs</i>
3		
4		<i>Repeating syllables 'ty-ty-ty'</i>
5		
6		<i>Sleeplessness</i>
7		
8		<i>Banging head</i>
9		
10	Worst pain	<i>Withdraw; closed eyes, flaring nostrils</i>

Table 1. Example of Individualized Numeric Rating Scale

9 Solodiuk, J. & Curley, M.A.Q. 2003. Pain assessment in nonverbal children with severe cognitive impairments: The Individualized Numeric Rating Scale (INRS). *Journal of Pediatric Nursing*, 18(4): 295-299.

Detecting pain is only the first step in managing a child's pain. In the next chapter, we will discuss ways of setting boundaries to combat pain.

CHAPTER 3

Ten boundaries for pain

You've completed your investigation and you've detected pain in a child. Now what?

In this chapter, we're going to explore some boundaries that we can set for the pain to prevent it from controlling the life of a child.

As discussed in Chapter 1, the pain impulse is influenced and can be changed at different stages of the road on which the pain impulse travels from the injury site to the brain and back. Let's have a look at how different boundaries along these paths can combat and manage pain.

Boundary Number 1: Comforting and upright position

When a mother is trying to console a crying baby, chances are that at some point, she will start to rock the child to-and-fro. This is pure instinct from a caring mother, as it was found that holding a baby in a comfortable position and rocking him/her slightly can significantly reduce stress and help the baby to cope better with pain. As you know by now, the pain impulse must go through the roadblock in the limbic system or emotional part of the brain first before it can be interpreted by the brain cortex. If someone is relaxed, the pain impulse is registered as much less severe.

For this same reason, children will experience much less stress and subsequently also less pain if they are held in an upright and comforting position by a parent during medical procedures. Lying down during a medical procedure is frightening for children, as they may feel that they don't have any control over what is happening. Restraining a child can increase fear and anxiety, and often result in the child experiencing pain even before any procedure has started. Please discuss this with your healthcare provider to explore ways to keep the child in an upright position during a medical procedure, and to distract him/her rather than restrain. Unfortunately, this will not always be possible.

Remember that children will look at the adults around them for cues on how to act in each situation. If you are with a child during a medical procedure or after a traumatic experience, it is very important that you stay calm and relaxed and talk to the child in a soothing voice. If possible, try and limit the number of people talking to the child, as it can sometimes get a bit confusing if everyone (sometimes with the best intentions) is trying to comfort a child.

When an adult touches a child in a comforting way, it communicates empathy to the child, and the peaceful state of the adult can be passed onto the child and serves as a cue that there is no reason for distress. Even in adolescents, it was found that touch and the holding of hands can significantly reduce stress and increase coping with pain during medical treatment.¹⁰ However, if you know that you will get upset or won't be able to cope with the situation, rather leave the child in the capable hands of the healthcare provider and wait outside the treatment room.

Boundary Number 2: Knowledge

As mentioned previously, fear and distress can increase the perception of pain, which in turn will increase fear, resulting in a vicious circle. If a child is prepared for all healthcare experiences and knows exactly what to expect, it can significantly alleviate fear and distress and therefore reduce the pain experience. If you are always open and honest about upcoming events (even the not-so-

TIP

Remember to use words that are not frightening to a child.

It is much less frightening to use phrases like *'the doctor is going to make a small opening'* instead of *'the doctor is going to cut you open'*.

You can also explain that they are going to put a *'small tube'* in your child's arm instead of a *'needle'* when your child needs a drip. This is the truth as the needle is removed after the drip is in the vein and all that is left is a very small, soft tube.

¹⁰ Vannorsdall, T., Dahlquist, L., Pendley, J.S. & Power, T. 2004. The relation between nonessential touch and children's distress during lumbar punctures. *Children's Health Care*, 33(4): 299-315.

nice experiences) it will serve to build a child's trust and further lessen fear and anxiety.

Preparing children

Children can be prepared for an operation, medical procedures, a visit to the dentist or even the removal of a splinter in the foot at home in five easy steps. You can also include this information in a story about another child going for the same procedure, and explain everything the child in the story is experiencing. Books about going to hospital can be a great introduction to your preparation, as is a medical playset.

You can start to prepare a child from about two years old. If it is a planned visit to the doctor or hospital, you can start preparing the child one to two days in advance. School-age children can be prepared about a week before the time.

Use the following five steps to prepare children:

► **Step 1: Clarify misconceptions**

Ask children what they think is going to happen. Listen for any remarks that can indicate that a child has the wrong idea about the procedure or that he/she thinks that it is a punishment for some wrongdoing. If you find that there are any misconceptions about the procedure, don't laugh or belittle the child, but rather give the correct facts in a gentle manner.

► **Step 2: Explain the reason for the upcoming procedure**

After ensuring that there are no misconceptions, explain the reason for the procedure in a language that the child can understand. Tell the child that he/she is not being punished for some wrongdoing. Remember that children are not able to understand abstract ideas and will create a concrete picture of what you are telling them. It is therefore important to ensure that the pictures they are creating in their minds are not causing any further confusion.

Let's take a vaccine injection as an example. You can explain how germs sometimes get into our bodies to make us sick, but that the injection will give the good soldiers in the child's body some weapons with which they can fight

against the germs of a specific illness. Explain that each disease is different so that the child's trust is not broken when he/she gets a different disease.

D Step 3: Give details about the different steps of the procedure

Ask your healthcare provider to explain the procedure to you so that you know exactly what is going to happen and can explain it to the child. Give details about every step of the procedure and remember to include small details, such as cleaning the skin with a cold wipe. For smaller children, you can compare the time it will take to complete the procedure to a well-known activity. You can say something like this: *'To give an injection will take less time than brushing your teeth'*, or *'To take an X-ray will be quicker than a television commercial'*.

D Step 4: Describe what the children will see, hear, smell, taste and/or feel

Include children's sensory experience in the preparation. Explain exactly what they will see, hear, smell, taste and/or feel, such as that cleaning the skin before an injection feels cold, or that an anaesthesia mask can smell funny. However, keep in mind that feelings are subjective, so don't give your own meaning to an experience. It is possible for a child not to experience pain when blood is drawn or a drip is put up. You can explain by saying something like this: *'Some children say that putting up a drip feels like someone is pinching you; others say they don't really feel anything.'* When a child has to take some medicine, you can say: *'The medicine will taste like something you have never tasted before – some children like it and some don't.'* Afterwards you can encourage the child to tell you exactly how he/she experienced the procedure.

D Step 5: Explain to children what is expected of them during the procedure

Lastly you can tell children what they should do during the procedure. Do not focus on their emotions but rather on their actions. For instance, you can explain that they must keep their arm still to draw blood but that they can wriggle their toes. You can also make suggestions on what they can do to distract themselves during the procedure, as discussed in the following section. Remember to keep all suggestions in the positive and say something like: *'You must try to keep your arm as still as a statue'* rather than *'Don't move your arm.'*

Don't tell children before a procedure that it's okay to cry. This will create an expectation of pain and increase anxiety. If a child starts to cry during a procedure, you can then reassure him/her that it's okay to cry. Don't be embarrassed by a child's crying, as it is a normal way to express emotions and to cope with a difficult situation.

Remember that you can change the meaning of a situation for a child. I'll never forget one particular lady whose child was admitted for a tonsillectomy. She seemed so excited about everything that was happening in the ward and approached the whole experience as one big adventure, encouraging her son to see it as an adventure as well. As a result, her son was coping remarkably well with the whole experience and didn't even complain of pain after the operation. If you are relaxed and calm and can persuade children to see the hospital environment as friendly and fun to explore, they will see everything in a more positive light, and even pain experiences will be reduced when screened by the limbic system in the brain.

Boundary Number 3: Distraction

Maybe you can remember a time when you were unaware of what should have been a painful incident, just because you were preoccupied with another activity. Well, there is a very good reason for that. When someone is engaged in an interesting activity, it causes less blood flow and activity in the part of the brain that processes pain, resulting in a decreased pain experience.¹¹

Despite claims from certain people to be excellent in multi-tasking, our brain can only focus on one activity at a time. Distraction works best for short-duration pain, such as during a medical procedure, but it can also be effective for chronic or long-term pain.

It is important to prepare children for medical procedures ahead of time so that they know what to expect, and to keep them updated with the progress during the procedure. Never trick a child by distracting on the one

11 Petrovic, P., Petersson, K.M., Ghatan, P.H., Stone-Elander, S. & Ingvar, M. 2000. Pain-related cerebral activation is altered by a distracting cognitive task. *Pain*, 85: 19-30.

side whilst surprising him/her on the other side with a painful procedure. It will be very difficult to gain the trust of that child again.

The activity used during distraction should fit the developmental level of the child so that it is interesting and captivating but not too difficult. When children are under stress, they will most likely not be able to master activities on the same level than they would have under normal circumstances. Never criticize their abilities during an activity, as this will make them feel inadequate and hinder their ability to cope with the procedure.

Activities that require input and action from children work best, and the more senses that are involved, the better. Some of the ways in which children can be distracted include the following:

- ▶ Music, especially singing along with the music.
- ▶ Blowing and breathing activities, such as blowing bubbles or blowing a party blower or a pinwheel. The deep breathing required for these blowing activities will also help the child to relax.
- ▶ Games and puzzles.
- ▶ Arts and crafts not only distract but are also great ways for children to express their feelings.
- ▶ Reading pop-up books, especially if the child can get involved in the story by answering quizzes or turning pages.
- ▶ Watching television, 3D viewers or kaleidoscopes.
- ▶ Interactive computer games and even virtual reality technology has been used successfully in distracting children during procedures.
- ▶ Puppets and finger-puppets can distract children and also assist in communicating with them.
- ▶ Something else that has been reported to be successful in distracting children during injections is called the 'Cough trick'.¹² This involves asking the child to give a moderate cough just before the needle is going in, and again while the injection is being given. It is intended for injections in the muscles and not for longer procedures, such as putting up a drip.

12 Wallace, D.P., Allen, K.D., Lacroix, A.E. & Pitner, S.L. 2010. The "Cough Trick:" A Brief Strategy to Manage Pediatric Pain From Immunization Injections. *Pediatrics*, 12(2): e367-e373.

- ▶ When putting up a drip, I found it works well for some children if they are asked to squeeze my hand with their free hand. It takes the focus off the hand where the drip is being put up; it gives them some sort of control (they can show me how much it hurts by squeezing harder), and it creates a competing sensation in the free hand. Just check the strength of the child's squeeze first, as I've learned from (sometimes very painful) experiences that some children can squeeze very hard!

Boundary Number 4: Relaxation

We've already discussed the effect of stress and anxiety on pain, and this can be effectively conquered by active relaxation. In addition, relaxation can aid in the secretion of endorphins in the body, which will further combat pain, as discussed in Chapter 1. If children are relaxed, it will also increase feelings of control and enable them to cope better with any stressful situation. Tense muscles not only increase the feeling of pain but can also cause pain. Relaxation is effective for short-duration pain, as well as chronic or long-term pain, as it can increase the pain tolerance of children. It is therefore clear that relaxation has many benefits and is worth pursuing.

Being comforted by a parent and keeping a child in a comfortable position (discussed above in Boundary Number 1), is the first step towards relaxation. Make sure that you are also relaxed, as children are very perceptive to the feelings of adults around them, and your anxiety can be carried over to the child. Do a regular self-check of your facial expressions and tone of voice to make sure that you convey a sense of calmness.

Scrutinise the language that you use with children and make sure you give statements in the positive. The human brain does not comprehend negative statements. If you say to a child *'Don't be scared'*, the brain will only react to the word *'scared'* by calling up images of another situation or object that the child is scared of, and by secreting more stress hormones. Rather say something like: *'You can relax – I am here for you and I will take care of you.'*

Relaxation training, where children are taught to purposefully concentrate on achieving a sense of calmness and peace of mind, can seldom be used

on its own in children. Relaxation works best when combined with other techniques, such as the following:

- ▶ **Deep breathing** – can be combined with blowing activities such as blowing bubbles or blowing a party blower or a pinwheel.
- ▶ **Gentle massage** – don't use kneading or patting movements but gently massage the child's shoulders, back, arms, legs and even the sides of the head with soft but firm, slow strokes that will encourage relaxation. Gentle massage is also very successful to combat crying episodes in a baby.
- ▶ **Music** – Baroque music has a calming effect on the brain but it is important that the child must like the music. Any other calming music will also work.
- ▶ **Relaxation exercises** – progressive muscle relaxation can be used effectively in children if guided carefully by an adult. One group of muscles at a time is purposefully contracted and then relaxed, till the whole body is in a relaxed state. Draw the child's attention to the difference between tense and relaxed muscles. This should be done in a quiet environment and/or relaxing music can be played simultaneously.
- ▶ **Guided imagery** – pretend to play a game and encourage children to imagine themselves in a relaxing place, such as at the beach. You can then talk a child through the experience and imagine what he/she will be able to see (sea gulls), hear (waves breaking on the beach), feel (sand under the feet), smell (sea air) and even taste (ice cream) during this experience.
A note of caution: Do not touch the subject of taste if a child is not supposed to eat before an operation! It is also important that the child chooses their own relaxing place – not all children might regard the beach as relaxing.

- ▶ **Making it concrete** – fears and worries are abstract ideas and very difficult for children to understand. You can explain to them that fear is a feeling inside the body, just as happiness and sadness are. Ask them what they think it would look like and give them the opportunity to draw a picture of the fear if they want to. You can then encourage them to keep this picture in mind, while imagining the fear leaving their body.

Boundary Number 5: Heat and cold

As explained earlier, some of the nerves carry signals of hot and cold to the brain. In the spinal area, the gatekeeper decides which impulses can go through, as all the nerves cannot send impulses to the brain at the same time. Therefore, if you apply moderate heat or cold to a painful area, the pain impulses going through to the brain are much less. In addition, cold packs will decrease the flow of blood to an area, reducing bruising and swelling, whereas heat will increase blood flow to an area and assist in relaxation.

When to use what?

A cold pack can be used to block acute pain during procedures by applying it to the area just before an invasive procedure, such as an injection in a muscle or the removal of a splinter in the foot. Cold packs also reduce bleeding under the skin or in a muscle or joint after an injury, and is therefore useful as early treatment of an injury. Cold eases the redness, swelling and pain associated with inflammation after an injury and further contributes to a speedy recovery. It can also be helpful in reducing the pain of a headache or migraine.

Heat packs are more effective for chronic pain and to relax muscles but should not be used if there are signs of inflammation, such as redness and swelling. If headaches are caused by stiff muscles, a heat pack at the back of the neck might help, otherwise

WARNING!

Always supervise a child and never put a hot or cold pack on a child with reduced sensory feeling, or who cannot move away or tell you when it becomes uncomfortable. Both hot and cold packs can cause damage to the skin if left for too long.

Ice packs must be wrapped in a soft cloth – never put an ice pack directly on the skin.

Never use hot water bottles as leaking water can cause severe burns. Also, be very careful if you heat a pack in the microwave, as this can cause areas of extreme heat, while other areas are not so hot.

a cold cloth on the forehead will be better. Stomach pain caused by cramps will also benefit from heat.

Boundary Number 6: Tactile stimulation

In the same way as heat and cold, tactile stimulation can also prevent pain impulses from going through to the brain, and can significantly reduce the experience of pain. You can use a small vibrating device with a high frequency, or even tap, stroke or gently rub the area with your fingers or with a hairbrush with soft or rounded bristles. This technique usually works well if applied just above the area of an invasive procedure, such as drawing blood or putting up a drip. It is important that the stimulation is applied as close as possible to the painful area, but between the painful area and the spine. You can ask your doctor or nurse to show you in which direction the nerves are travelling from the site of the injury towards the spine (usually upwards), so that you can know where to apply the tactile stimulation.

Boundary Number 7: Swaddling, facilitated tucking and kangaroo care

These are all methods being used in infants to help them to relax and mimic the controlled and secure environment of the womb. By feeling safe and secure, your baby's pain experience can be reduced significantly.

Swaddling have been used for ages and involves firmly wrapping the infant in a blanket. It can also be used during painful procedures to reduce the pain experience of the baby. Besides providing security and helping them to relax, it is also helpful in assisting a baby with sleep. Some babies might twitch in their sleep and when their arms are wrapped securely inside the blanket, it might prevent the twitch from becoming a major jerking action that can wake up the baby.

Instead of wrapping a baby in a blanket to keep him/her secure, **facilitated tucking** can be used. This is when a caregiver holds a baby in a secure position using their hands. Think about the cosy position of a baby while in the womb, also called the foetal position. The baby is placed on his/her side on a soft

surface and held with both hands on top of the body, with the arms and legs bent and close to the body as in the foetal position. This position is only effective if the baby is small enough to be held securely by the hands of the caregiver.

Kangaroo care is when a baby is dressed only in diapers and placed on the bare chest of a parent. The skin-to-skin contact relaxes the baby, increases security and reduces the pain experience of the child.

Boundary Number 8: Breastfeeding

Years ago, mothers breastfed their baby sons when a circumcision was performed to reduce the pain caused by this procedure. Nowadays, babies receive anaesthesia for this specific procedure, but breastfeeding can still be used during procedures and was found to be very effective in reducing the pain experience. Babies younger than six months can be breastfed during blood draws, vaccine injections, as well as heel pricks (a procedure often used in small babies if only a few drops of blood are required for a blood test).

Start with breastfeeding about a minute before the procedure and make sure the baby latches properly. Carry on with the breastfeeding during the procedure and continue for a few minutes afterwards. Sucking on a dummy or bottle-feeding with formula or expressed breast milk can also be used if you cannot breastfeed.

Breastfeeding combats pain in the following way:

- ▶ The presence of the mother and skin contact with her is comforting to the baby and serves as a distraction for the baby.
- ▶ The sweet taste of the breast milk was found to reduce pain.
- ▶ It is believed that breastfeeding can increase the release of endorphins in the baby.

Boundary Number 9: Healthy lifestyle

The sooner children are taught the principles of a healthy lifestyle, the easier it will be for them to follow these principles for the rest of their lives. A healthy

diet and enough exercise are not only important aspects of a healthy lifestyle, but it can go a long way in combating pain as well.

It was found that certain foods can reduce the sensitivity of nerves detecting pain or diminish the pain impulses that are sent to the brain. However, more research is needed in this area. Foods containing Omega 3 oils, magnesium, vitamins A, B, C and E, as well as Selenium, were all found to be effective in preventing pain and painful conditions. On the other hand, a diet high in saturated fats, sugar, refined starches and yeast can increase inflammation in the body and trigger some painful conditions, such as stomach aches and headaches. Children should get used to eating a healthy diet from a young age, but if you decide to change your eating habits, or if you want to introduce new foods at a later stage, do it slowly and with a lot of fun. The story of Popeye was a winner in convincing my son to love spinach.

We all know that children in general don't get enough exercise these days. Children have a natural yearning to be active, and it is up to us to create enough opportunities for them to be active from a young age. Unfortunately, schools are very competitive in their sports and if children do not excel in sports, other opportunities to get active are limited. It is therefore up to parents and caregivers to create opportunities for children to be active. Get them involved in walking the dogs, join a gym, sign up for swimming lessons or go on a hike over weekends. Do whatever it takes, as long as you get children to be more active.

Here are a number of reasons why children should be more active:

- ▶ It will combat stress.
- ▶ They will be able to concentrate for longer periods and it will improve their memory.
- ▶ It increases their self-esteem.
- ▶ Their immune system will be boosted and it will increase their stamina.
- ▶ Hyperactive children will get the chance to get rid of all the extra energy.
- ▶ Exercise will prevent obesity, as well as the risk of getting diabetes.

And the best one:

- ▶ Endorphins are secreted, which will result in happy feelings and less pain!

Boundary Number 10: Last but NOT least – Use medication

As important as the above-mentioned boundaries are, they can never replace pain medication. Never withhold pain medication from a child if needed. Parents are often concerned about the effect of pain medication on a child, but if medication is given the way it is intended to be given – and **only** if a child is in pain – there is no reason to be concerned.

Pain medication can be divided into two groups: Medication that you apply on the skin (topical) and medication that you drink (oral).

WARNING

Always consult your doctor or pharmacist before giving a child any pain medication.

Aspirin should not be given to a child younger than 12 years, unless prescribed by a doctor.

Codeine should never be given to a child and even adults should exert caution when taking this medication. Codeine is changed into morphine by an enzyme in the body before it can have an effect. Children are born without this enzyme, and only start to develop the enzyme during the first five years of life. However, different people have different amounts of this enzyme, leading to either an increased or a decreased amount of codeine that is changed into morphine, and therefore the sensitivity to codeine differs from one person to the next.

Codeine is also potentially addictive.

● Topical medication

It is possible to block pain on the skin before the impulse even begins its journey to the brain. Several creams are available to numb the skin before medical procedures, such as putting up a drip or giving an injection. They need some time to work and can therefore not be used in an emergency. Ask your

pharmacist or doctor about these creams, and make sure that you know how and where to apply this before a procedure.

For minor sporting injuries in school-aged children, heating or cooling gels can be applied. These gels create the feeling of heat or cold and combat pain in reducing the pain impulses going to the brain. It can also increase blood flow to an area and/or reduce swelling and can therefore assist in the healing of minor injuries. However, it is important never to use it on broken skin, to follow the instructions on the medicine label and to pay attention to the age restriction. Always test the gel on a small area of the skin, as some children might not tolerate the intensity of the hot or cold feeling well.

D Oral medication

Each pain medication works in a specific way. Anti-inflammatory medication works in the area of the injury by reducing inflammation. Other medications influence the pain perception in the brain, and some can block the pain impulse in different parts along the pathway towards the brain. It is also possible that two different drugs can work in the same area and could lead to an overdose if given simultaneously or too soon after each other. It is therefore important to read the label and package insert and to always consult your doctor or pharmacist before giving a child any pain medication.

Giving children medication

Often one of the biggest challenges facing a parent is getting their children to drink medication. Here are some tips to help children to take their medicine.

- D Stay calm.** Giving children medication can soon end up in a battle where no one is the winner. It is normal to tense up if you know a child has to take a much-needed medication but bluntly refuses. However, the child might sense your frustration without understanding the situation, and this can cause him/her to become anxious and even fearful of taking the medication. Be mindful of your own facial expression. If you dislike taking medicine and it shows up on your face, you might have a difficult time convincing the child that there is nothing wrong with the medication.

- ▶ Tell children ahead of time that they must take medication and explain the reason for it in a way that they can understand. According to the age and personality of a child, you can say something like this: *'The medicine will give the good soldiers in your body some weapons to fight against the pain in your body.'* Keep the explanation short and refrain from going into long discussions about the importance of taking the medication.
- ▶ Be honest without giving your own meaning to the situation. It is possible for a child to like the same medication that you detest. Preferably tell children that the medication is going to taste like something they have never tasted before, and that you don't know if they will like it or not, rather than telling them that it is going to taste bad.
- ▶ Acknowledge children's feelings if they don't like the medication, and offer some strategies in coping with the bad taste, such as letting them pinch their own nose. You can also try to give the medication with a small amount of yoghurt, jelly or apple sauce, or give something sweet like honey or even sour jellies just after the medication to take away the taste. The colder something is, the less intense the taste tends to be, so you can mix some frozen yoghurt with the medication. You can also give the frozen yogurt just before the medication to numb the taste buds, and again after you've given the medication to take away the taste. Just make sure that you check with your doctor or pharmacist if you can give the medication with these foods.
- ▶ Give as many choices as possible to allow children more control over the situation. Children don't have a choice whether they want to take the medication, but they can choose between using a small cup, spoon or a syringe to take the medicine from. If possible, let them choose whether they want to take the medicine before or after a snack, or whether they want milk or fruit juice to swallow the medicine with. If they have to take more than one medication at a time, let them choose the order in which to take it.
- ▶ Let children play with the cup, spoon or syringe you're going to use so that they can get familiar with it. They can play in the bath with a syringe or they can squirt water paint onto a piece of paper (preferably outside). Encourage a child to give medication to a doll or teddy with the same

spoon you will use for the medicine, or let them water your pot plants with the medicine cup.

- ▶ If an older child is struggling to swallow capsules, you can give it with a fizzy drink. The bubbles tend to disguise the capsule and lift it up in the mouth so that it doesn't get stuck to the tongue. You can try this with capsules and sugar-coated pills but not with powdery pills, as the pill will react with the gas and cause it to foam.

From personal experience

Some people might find it difficult to imagine that a child will hide pain because of bad-tasting medicine. However, for some children (including my own son) there can be nothing worse than having to swallow medication with a strong taste. When I took him for his immunisation at the age of five, he was well prepared for the vaccine injection and couldn't wait to get it over and done with. Very bravely, he marched out in front of me to the clinic. But his bravery didn't last very long! He had to get the bitter-tasting polio vaccine drops in his mouth first – something I neglected to prepare him for, as it never occurred to me that children should be prepared for bad-tasting medicine as well. He ranted and raved, so upset with me for not telling him about the medicine, that all his coping skills for the injection itself went out the door. I left the clinic with a crying child, who found it very difficult to forgive his mom – not for taking him for his immunisations, but for neglecting to tell him about the horrible medicine he had to take! Needless to say, he never had a problem with future injections but was very reluctant to take any medication in his mouth from then on.

CHAPTER 4

Different conditions – different pain

In this chapter, we'll look at different conditions that can cause pain and how to handle the pain caused by these conditions. Refer to the previous chapter for more information on the techniques discussed here.

Medical procedures

Taking a child to the doctor, clinic or hospital for a medical procedure may be a scary experience, but this needn't be the case. Deal with your own feelings first, so that you can be calm and relaxed and able to support the child through the experience. Children are very sensitive with regard to the feelings of adults and will evaluate a situation according to how the adults react. Never threaten children with medical procedures, as it will confirm any misconceptions the child may have of being punished for some wrongdoing.

Parents and caregivers are an important part of the healthcare team, and vital to have on board. You are your child's most important source of support, and the expert with regard to the welfare of your child as nobody else knows the child better than you do.

Many parents are concerned about the pain that children experience during vaccinations and some parents are even hesitant to take their children for their much-needed immunisations because of this fear. Fortunately, it is easy to handle pain during vaccine or other injections. Several interventions can be used successfully to improve the experience of injections for children.

Other medical procedures such as drawing blood, putting up a drip, getting stiches or inserting a urinary catheter for a child are a bit more challenging, but there are still a few techniques that you can use to make the experience less painful.

- ▶ Prepare children for any medical procedure. Do not tell a child that it is **not** going to hurt, as this may affect the child's trust in you if he/she finds the experience painful. Rather say something like: *'I don't know if this is going to be sore. Some children say it hurts a bit and some say it doesn't. But I am going to be there for you and help you by reading you this story.'* Just so that you know: some children really don't experience any pain from something like an injection or blood draw.
- ▶ Examine your language and use positive statements as far as possible, such as: *'I am here for you'* or *'Let's play this game and you'll see how much better it will make you feel'* rather than: *'Don't be scared.'* Focus on the outcome of the procedure by saying something like: *'The doctor is going to make the hurt on your leg better so that you can go back to riding your bike again.'* Just don't make false promises. Also, check with your doctor first as to when your child will be able to engage in normal activities again.
- ▶ Take the child's favourite soft toy or blanket with you to the doctor or hospital. A medical playset will assist in preparing children for procedures, and will also familiarise them with the equipment used at the hospital or doctor's rooms. It will also help children to cope better in future if they can re-enact the procedure afterwards and play out everything that happened to them.
- ▶ If possible, keep children in an upright and comforting position. Please note that this will not always be possible but it is worth discussing with your healthcare provider. Remember, the purpose here is that you are with the child to comfort him/her, not to assist in holding the child down for the procedure. The child needs to trust you and feel safe with you, and not feel as if you are one of the people responsible for the pain.
- ▶ Distract children and help them to relax. A big, colourful storybook will not only be effective for distraction, but it can also assist in blocking the child's view of a procedure.
- ▶ Give children some choices in order to increase their feelings of control in the situation and to make it less scary. They don't have a choice in getting the procedure or even the time when it is done, but they can decide whether they want to watch the procedure or not, if and how they want to be distracted during the procedure, or if they want to sit on a chair or on your lap.

- ▶ For a vaccine injection or finger prick, you can apply an ice cube **for a short time** to the area immediately before the procedure. Just be aware that some children may experience it as painful and it could therefore increase the negative experience. First experiment with this at home.
- ▶ Numbing creams are available over the counter for an injection, blood draw or for putting up a drip. Just remember that these creams only numb the skin, and the child might still experience pain if the medication/vaccine is going to burn deep into the muscle. Ask your doctor or nurse where to apply the cream, which cream to use and follow the instructions carefully. Remember to apply it at least an hour before the procedure. For this reason, it cannot be used in case of an emergency, such as when a drip has to be put up immediately.
- ▶ Tactile stimulation, such as a vibrating device, can be applied just above the area where the needle will be inserted. Alternatively, you can tap, stroke or gently rub the area above the injection site with your fingers or a hairbrush with soft, rounded bristles during the procedure.
- ▶ In a small baby under the age of six months, swaddling or facilitated tucking can be used in combination with breastfeeding, as explained in the previous chapter. If you are unable to breastfeed, you can give formula or expressed breast milk via a bottle, or the baby can suck on a dummy, as this will all help to reduce the experience of pain during a medical procedure.
- ▶ The 'Cough trick' can be used successfully during injections as mentioned in the previous chapter (Boundary Number 3). This involves asking your child to give a moderate cough just before the needle is going in, and again just as the injection is being given.

Remember to give positive feedback after the procedure. If children believe that they were successful in coping with a medical procedure, it will boost their confidence and they will be able to cope better in future. If it didn't go as well as you anticipated, you can still comment on what the child did right and say something like: *'I am so proud of you that you were able to keep your arm still for the injection.'* Even if you had to hold the arm, you can add: *'Lots of children need a little bit of help to keep their arm still and that's also okay – I still think you did a great job in there.'* In addition, it can also be beneficial to

give something like a sticker or certificate after the procedure to reinforce the positive feedback.

Lastly, make sure children don't witness procedures on other children. Before you take both your twins, or a friend's child together with your child for something like a vaccine injection, you have to be very sure that both children will be okay with the procedure. If one of them gets upset and starts to cry, it can be very upsetting for the other child to see.

A visit to the dentist

Hopefully a child's first visit to the dentist will not be painful. If your dentist has some toys and a play area for children in the waiting room, it will help to create a positive experience for children. Alternatively, you can take some of the child's favourite toys with you. If possible, take children to the dentist for a general check-up before it is necessary to work on their teeth. Ask your dentist to show the child how the chair is working before he/she sits on it. Explain to the child what the dentist is going to do and why, and again make sure to check your own feelings and facial expressions so that you don't convey your own anxiety to the child. Most of the time a visit to the dentist is not painful, but if children are anxious, they may experience it as painful. Try and find out what is triggering the anxiety, as sometimes it may be a misconception.

If your dentist must work on the child's teeth, you can try the following techniques:

- ▶ Prepare children for the experience. Be careful not to carry your own fears over to the child, but rather focus on the excitement of a new experience in a positive way.
- ▶ Look for a medical playset that contains some dental equipment. This is a great tool to prepare children and give them the opportunity to play out the experience. My children had a dinosaur with an open mouth and lots of teeth, making it an excellent toy for dental play.
- ▶ If the big lights are too bright for children, you can encourage them to wear sunglasses or look into a picture viewer or kaleidoscope.

- ▶ Listening to music over headphones can block out the noise from the equipment. Soothing music can have the added benefit of helping children to relax, but it is important that they like the music.
- ▶ Distraction and relaxation will work wonders in making the visit less stressful and helping the child to cope with the experience. See the discussion in the previous chapter.
- ▶ Tactile stimulation – tickling, rubbing or even using a small vibrating device on the outside of the cheek just in front of the ear can help to prevent some of the pain impulses from travelling to the brain.
- ▶ If your child is very anxious, you can discuss with your dentist the possibility of medication to help the child relax.

Falls, bumps and injuries

Falls, bumps and injuries are all part of childhood and of growing up, but that does not make it less traumatic for the child or the parents and caregivers. Always make sure that children's immunisation schedules are up to date so that they are covered for diseases such as tetanus, which can be caused by dirt entering through scrapes and wounds.

If you can stay calm and focussed, chances are that the child will also cope better. It is scary for children to see blood as they generally don't understand the working of their bodies, and might even believe that all their blood is going to leave their body. Explain to children that the blood is good for the injury as its purpose is to clean the wound and fight against germs. You can also describe how some of the good soldiers in the body (platelets) will rush to the wound to make sure that the blood will stop after it has done its work. Kiddies' plasters are an excellent tool to keep handy for small cuts, as they are not as sticky and difficult to remove as the other plasters. They can become a reassuring ritual for minor injuries.

Let's look at what to do for common injuries. Please take note that, for the purpose of this discussion, the focus will be on treating pain in normal day-to-day injuries. It is not intended to be a first-aid manual for more serious injuries. For open wounds, please seek medical attention.

The actions to be taken can be summarised with the acronym 'RICE':

- ▶ **Rest** – encourage children to spend some quiet time relaxing with a favourite activity to give them time to recuperate. You can put a light bandage around the injured body part to keep it still and to prevent further damage. Remember that shock tends to numb pain and children might not feel pain right after an injury, so continue to monitor the child. As children get older, social pressure starts to increase and children might ignore pain or ask for pain medication so that they can carry on with their activities. It is important to explain to children that pain is the alarm system of the body, and that the body needs time to rest in order to recover from the injury, otherwise they can hurt themselves even more. Although you don't want to withhold pain medication from a child, it is not intended to numb the pain just so that a child can carry on with normal activities.
- ▶ **Ice** – a cold pack prevents swelling and bleeding under the skin, and also helps to numb the pain. Never put a cold pack or ice directly on the skin, but always wrap it in a soft cloth and remove it if the child complains that it is getting uncomfortable. Don't use a cold pack on a child that cannot tell you when it is getting too cold.
- ▶ **Compression** – light pressure on the injured area can help to stop superficial bleeding or bleeding under the skin. Never put a tight bandage around an injured area as you can cut off the blood supply to the area if the limb starts to expand due to swelling.
- ▶ **Elevation** – putting the injured body part on some pillows will reduce blood flow to the area, reduce swelling and help to combat pain.

If children have had a big fright, they can tremble and that can be a scary feeling for them if they don't understand what is happening to their body. Remember, much of what is happening to us as adults, is common knowledge. For instance, if you had a frightening experience and start to shiver afterwards, you know that you are shivering from the shock. You can acknowledge it, brush it aside and move on. When a child starts to shiver uncontrollably, it might be very confusing and, apart from dealing with the shock, the child must now also deal with an unfamiliar experience in his/her body that might be even

more scary. Explain to children that their body had a fright and now wants to get rid of all the scary feelings. If the child is not injured, you can encourage him/her to do some physical exercise or jump up and down in order to get rid of the extra energy.

Also remember that if children have had a big shock, the brain is blocking out all new information as a protection mechanism, and they will not be able to understand long explanations. For this reason, it is more important what you **do** in a crisis to reassure a child than what you **say**. Also wait till everybody is calm before you address anything that the child did wrong. Focus on what the child could have done differently to avoid the injury.

Weak body posture and/or carrying heavy backpacks can lead to back pain and muscle injuries in children. During the early adolescent growth spurt, boys tend to experience reduced flexibility, whereas girls have an increase in flexibility. This could lead to muscle and joint injuries in both these groups. Although it is important to rest after an acute injury, as explained above, complete rest for an extended period is not always desirable as it could lead to an inactive lifestyle. Rather consult a physiotherapist or biokineticist specialising in children, so that rehabilitation techniques can be explored and future injuries prevented.

Having an operation

Prepare your child for the operation

Always start by explaining to a child the reason for an operation, as children might see it as punishment for something they did wrong, especially if they experience pain after the operation. When I prepare children for an operation, I always casually mention that they haven't done anything wrong and are not being punished. And, more often than not, the expression of relief on a child's face indicates that he/she had some misconceptions in this regard. It might be especially challenging if children haven't experienced any pain or discomfort before the operation, as this will strengthen the notion that they are being punished.

Feelings of guilt might increase a child's anxiety, and research suggests that if children are very anxious before an operation, it could intensify their pain

experience after the operation.¹³ Preparing children for the experience can thus help to get them more relaxed in knowing what to expect, and even assist in relieving the pain experience afterwards.

Follow the guidelines set out in the previous chapter to prepare your child for the operation and adjust it to your situation. One of the most frequent operations in childhood is a tonsillectomy, and will be used as an example to explain how you can prepare your child for an operation.

► Clarify misconceptions

Ask children what they think is going to happen. Listen carefully to anything suggesting that they might have any misconceptions, such as being awake during the operation, being punished for some wrongdoing or that they believe that their throat will be cut open, as these are common fears amongst children. Don't show your surprise or belittle a child if you detect any misconceptions but correct the facts in a calm and clear way.

► Explain the reason for the upcoming procedure

Tell children that they didn't do anything wrong. Because it is difficult for children to connect cause and effect, you can gently remind them of the times when they were sick. Name all the symptoms a child had when diagnosed with tonsillitis and blame it on the germs. You can say something like the following:

'There are germs (small bugs that we can't see) all around us that make us sick. Sometimes they go into your body, making your throat sore and causing your tummy to hurt. If the doctor gives you some medicine, the germs just climb into your tonsils and hide there. Your tonsils are two little lumps at the back of your throat, one on each side. Sometimes, the germs even build houses inside your tonsils. They can hide there for a long time so that the medicine can't reach them. If you feel better and don't have to drink

13 Kain, Z.N., Mayes, L.C., Caldwell-Andrews, A.A., Karas, D.E. & McClain, B.C. 2006. Pre-operative anxiety, postoperative pain, and behavioral recovery in young children undergoing surgery. *Pediatrics*, 118(2): 651-658.

medication any more, the germs just climb out of the tonsils and start to make your body sick all over again. Because of this, the doctor has decided to take out your tonsils so that the germs won't have a place in your body where they can hide.'

► Give details about the different steps of the procedure

You can tell children that, while they are asleep, the doctor will open their mouth and take out the tonsils with a spoon. Refrain from using words that might seem frightening to children, such as 'cutting' or 'knife'. If there is going to be a cut, such as in the case of an appendectomy, you can mention that the doctor is going to 'make a small opening' in the stomach instead of 'cut open'. Reassure children that they will be asleep through the whole procedure, as children are often afraid that they might wake up during the operation.

Ask your doctor or nurse to explain the hospital routine. You can also visit the hospital with your child ahead of time so that you know what to expect. Although you will not be able to enter the operating theatres, it will be reassuring for children to see the ward where they will be admitted before going to theatre, as well as where they will go after the operation if it is not in the same ward. Find out how long you will be able to stay with your child. Some hospitals allow parents to be with their children until they are asleep, but make sure of this information before mentioning it to your child.

► Describe what the child will see, hear, smell, taste and/or feel

Ask your doctor or nurse about the operation so that you know what the child is going to experience. Get a book or pictures of an operating theatre so that you can show the child what it looks like.

Some children don't like the smell of the anaesthesia that they will receive through a mask, while others don't mind the smell at all. Keep the possibility open for children to form their own opinion about this. You can prepare children for this in the following manner:

'The mask is going to smell like something you've never smelled before. Some children say it smells like the stuff you clean paint with, others say it smells like glue. You can tell me afterwards what it smelled like for you.'

You can also suggest some coping strategies, such as if a child doesn't like the anaesthesia mask, you can encourage him/her to 'blow away the smell'. If children concentrate on blowing into the mask, they tend not to notice the strong smell so much.

► Explain to children what is expected of them

Focus on the nice things that will happen during their stay in hospital, such as that you will be there with them and that they will be allowed to colour in or play with a favourite toy before going into the theatre.

Pain management after the operation

As explained in a previous chapter, children sometimes deny pain because they may be embarrassed, they think that they've done something wrong, or they are afraid of getting an injection or some bad-tasting medicine. Use the tools discussed in Chapter 2 to determine if your child is in pain and bring it to the attention of your doctor or nurse. Even though your child is in the care of the medical team, they need your help to make sure that your child does not suffer unnecessary pain.

Please note that it is very important to clarify with your doctor and to get his/her advice on the best way to manage your child's pain. **With your doctor's permission**, you can try the following suggestions after an operation:

- Medication – After an operation, it is very important to ensure that children receive the pain medication, as prescribed by your doctor, regularly during the first 24 hours and not only when asking for it. Pain sensors are concentrated on the skin and the most painful area after an operation is usually the area where the skin has been cut. Never give any additional medication (including herbal medication or other supplements) that is not prescribed by, or in consultation with, your doctor.
- Cold – Sucking ice after a tonsillectomy or cold packs on a wound in another area on the body might help to reduce pain and swelling in the area. Remember to always supervise a child and never put a cold pack on a child with reduced sensory feeling, or who cannot move away or tell you

when it becomes uncomfortable. Ice packs must always be wrapped in a soft cloth.

- ▶ Elevation – If an arm or leg has been operated on, you can put the limb on some pillows to further reduce swelling and combat pain.
- ▶ Tactile stimulation – If you softly rub the area just above or close to the operation area, you can also influence and lessen the pain impulses going to the brain. With your doctor's permission, you can even apply a vibrating device above the area that had been operated on.

Growing pains

People often attribute pain in childhood to growing pains. Please take note that a child can only be diagnosed with growing pains if **all other causes** are ruled out by your doctor. If the pain is persistent, interferes with activities during the day, is located in the joints or if there are any lumps, swelling, redness and/or fever present, you should not hesitate to take the child to the doctor.

Growing pains are cramp-like pains in the legs and usually affect both legs. It is worse in the evenings but disappears after a night's rest, and mostly affects children who are active during the day. Even though it is called 'growing pains', it is not necessarily linked to the growth spurts in children, and is most common between the ages of 3 – 4 years and again between 8 – 12 years. There is some speculation that it can be linked to restless legs syndrome in adults, but this has not been confirmed yet.

You can try the following strategies for these pains:

- ▶ Apply heat.
- ▶ Massage the legs. Children find massage very comforting. However, if the massage is hurting your child more and he/she is pulling away, it might not be growing pains and should be investigated further.
- ▶ Gentle stretching of the affected limb.

Colic

A baby is diagnosed with *colic* when crying for more than three hours a day, for more than three days a week for three weeks, yet is otherwise healthy.

This usually happens between the ages of two weeks and four months but can in some cases carry on until six months of age.

A baby that is crying non-stop, can wreak havoc in any household. Not only is it psychologically distressing for any parent, but it can also harm the bonding relationship with the baby. No parent wants to see his/her child in pain, and the parent can become torn between feelings of protectiveness on the one side, and resentment towards the baby on the other side. Babies in pain tend to push everyone away from them and it is normal to feel that the baby doesn't like you. A parent might even start to doubt his/her ability to be a good parent.

A baby does not have the intellectual ability to manipulate an adult, and there is a very real reason for the crying. Crying is not only a baby's way of telling us that something is wrong, but it is also a way of releasing pent-up frustration and stress. Researchers have different opinions as to what is causing some babies to cry persistently, but they all agree that there is a very real and painful reason for the crying. The term 'colic' was given to these babies because of the belief that babies cry because of stomach cramps. However, it became evident that there might be different reasons for the crying, such as migraine and headaches or even the over-stimulation of a sensitive baby. Not all babies react in the same way and it seems as if there might be different causes for the persistent crying of babies. If there is ever a need for you to be a good Pain Investigator, it is now.

Here are a few pointers that might be helpful when you are trying to cope with a baby's crying:

- ▶ First of all, have the baby checked out by a doctor. Constant crying can be an indication of some underlying medical condition, an allergy or even something like constipation.
- ▶ A baby's sucking reflex becomes stronger because of pain and it might seem as if the baby is hungry. If a baby is being breastfed on demand, it is possible to overfeed the baby, thus causing stomach cramps and discomfort, which might result in the baby crying even more. If you are unsure of the amount that a baby is drinking, weigh the baby before and after feeds to determine how much he/she is drinking at a

time. If you are unsure how to do this, contact your nearest clinic for assistance.

- ▶ If you are breastfeeding, try to change your diet to determine if certain foods are causing your baby's discomfort. There are conflicting ideas about this, but it is possible that something in your diet can cause an allergic reaction in the baby, such as dairy products, soy, wheat or peanuts. Sometimes stimulants such as caffeine or chocolates in your diet can cause discomfort in your baby and result in colic. It is worth experimenting by leaving out different foods, one at a time, for a few days to see if it makes a difference.
- ▶ Colic in an otherwise healthy baby might be the result of an imbalance in the intestinal micro-flora of a baby. You can ask your doctor or pharmacist to recommend a probiotic that is suitable for babies. Remember, never give a small baby any medication that you buy over the counter – always consult your doctor or pharmacist first.
- ▶ Swaddling, facilitated tucking and kangaroo care have all been proven to be effective in reducing an infant's pain. Chapter 3 has more information on these techniques.
- ▶ Gentle massage is also very successful in combating crying episodes in a baby. You can rub a little bit of unscented massage oil between your hands to warm it up before you start with the massage. It is advisable to test the massage oil on a baby's skin first to ensure that he/she is not allergic to it. Don't use kneading or patting movements but gently massage the baby's body in soft but firm, slow strokes that will encourage relaxation. Gentle movements of the legs, such as a bicycling motion, can also help with the digestion of food and relaxing the abdominal muscles. Keep eye contact with the baby while speaking in soft tones to further help him/her relax.
- ▶ A lukewarm bath can calm down and relax a crying baby, especially if the baby can lie back and relax against a baby bath chair. Just remember never to leave your baby alone in the bath, even if he/she is secure in a chair.
- ▶ Listen to some calming music as this will help both you and the baby to relax.
- ▶ Take care of your own emotional wellbeing and try to stay calm. Babies are very sensitive to the emotions of the adults around them. If you find yourself

all tensed up and anxious, chances are that you will carry these emotions over to the baby and he/she will also become anxious. If nothing seems to reduce the intensity of a baby's crying, the impulse might be strong to leave the baby in another room and close the door. However, it can be dangerous to leave a crying baby alone without supervision. You can try to listen to some music through headphones. This will help to soften the sound of the baby's crying, which might help you to relax while you stay with him/her in the same room.

WARNING!

If you as a parent get so tired and frustrated by your baby's crying that you feel as if you cannot handle it anymore, please seek professional help immediately. A baby's body is very fragile and if you take out your frustration on your baby in any way, you can cause considerable damage to the small body. Even if you shake your baby only once, it can still cause brain bleeding that can lead to mental retardation or even death.

Teething

A baby's teeth have already developed in the jaw while in the womb, and the teeth can start to push through the gums any time from three months of age up to a year, but usually around six months. When a baby's teeth are pushing through the gums for the first time, it can cause inflammation of the gums, which can be very painful.

Babies instinctively know that rubbing their gums will provide pain relief, and they will therefore put anything in their mouths that can rub against their gums. According to the *Gate Control Theory of Pain* explained in Chapter 1, anything that rubs or vibrates against your baby's gums can help to block the pain. Teething rings with little knobs on them or ones that vibrate are very effective. You can further assist babies by providing them with a special teething ring that has been put in the **fridge**. The cold not only blocks pain but can ease the redness, swelling and pain of the baby's inflamed gums. Just remember to never put a teething ring in the freezer as it might damage the

ring and cause it to chip off or break, forming sharp edges that can cut your baby's mouth. If the teething ring is filled with fluid, the fluid can expand when frozen and cause the ring to break.

If a baby is struggling with teething, you might want to try teething gels with local painkillers that can be used to numb the gums. Always ask your doctor or local pharmacist to recommend a teething gel as not all oral gels can be used for babies.

Headaches

There are different reasons why children experience headaches. There is a distinction between primary headaches (where the headache itself is the problem, such as migraine episodes), and secondary headaches (where the headache is a symptom of another disease).

Always consult your doctor first if a child is complaining of constant or recurrent headaches. If the headaches are accompanied by the following symptoms, you should see a doctor immediately or take your child to the emergency room:

- ▶ nausea and vomiting
- ▶ dizziness
- ▶ visual disturbances
- ▶ a sore and stiff neck
- ▶ if a head injury is suspected
- ▶ a headache in the morning that gets worse the moment the child gets in an upright position

Also remember that it is difficult for small children to distinguish the source of their pain, and children might complain of headache if they are suffering from an ear infection or a sore throat. Allergies can also cause sinus congestion and headaches, and your doctor will be able to give you the best advice in treating these allergies.

If no underlying medical condition can be found for a child's headaches, consider the following common causes for headaches in children. Sometimes

you will need all your skills as an investigator to find the cause for your child's headache, and the best option would be to keep a pain diary as described in Chapter 2.

► **Not taking in enough fluids**

By the time a child starts to feel thirsty, his/her body has already been subjected to a considerable percentage of dehydration. Children should be encouraged to follow a healthy lifestyle so that it can become a good habit from an early age, and this includes drinking enough fluids every day. At the age of three, children must have a minimum of one litre of fluids per day, and even more if it is hot and they are very active. This amount should be increased so that by the time children enter the adolescent years, they are taking about 1,5 – 2 litres of fluid per day. Encourage children to drink water from a young age so that they get accustomed to it. Fruit juice and sweetened drinks contain a lot of sugar that is unhealthy for a child's developing teeth.

If an otherwise healthy child is complaining of a headache, you can encourage him/her to drink a glass of water first to see if this will help for the headache, especially if it is a very hot day and the child has been running around a lot.

► **Irregular and unhealthy eating habits**

Skipping meals and eating refined carbohydrates can cause the body's glucose levels to go up and down, resulting in headaches. The brain needs a constant supply of glucose and if the glucose levels in the body drops, the brain is the first to suffer.

Make sure children eat a healthy breakfast before going to school. Choose foods with a low GI count and provide healthy snacks between meals.

► **Taking in too much caffeine**

If children are suffering from recurrent headaches, you might want to investigate the amount of caffeine they are consuming, such as tea, coffee, chocolate, energy drinks and some fizzy drinks. It is a common belief that caffeine is good for pain because of the fact that some painkillers contain caffeine. However, caffeine has many side effects, with headache at the top of the list.

Other side effects of caffeine:

- Nervousness, increased feelings of anxiety and jitteriness.
- Increased heart rate and respiration.
- Difficulty concentrating and increasing the symptoms of Attention Deficit Hyperactivity Disorder (ADHD).
- Stomach irritation that can cause abdominal pain.
- Sleeplessness – the effect of caffeine in the body can carry on for up to six hours, but it can influence sleep for longer than that. If a child is not sleeping well, keep track of the amount of caffeine he/she is taking in during the day.
- Dehydration – caffeine is a diuretic and can cause the body to lose more water by increasing urination.

So why is it included in some painkillers? First, caffeine tightens the blood vessels going to the brain, which might help in alleviating headaches and migraine. Second, caffeine enhances the absorption of other painkillers and it can also counteract the sedative effect of the medication. Never give children medication that contains caffeine (such as painkillers and medication for colds and flu) unless it is prescribed by a doctor. The overall use of caffeine should also be restricted as far as possible where children are concerned. Remember that caffeine is addictive, and when someone suddenly stops taking his/her usual amount of caffeine per day, this can also result in headaches.

► **Lack of sleep or change in sleeping habits**

Sleep recharges the body. The blood supply to the muscles increases, tissues are repaired and hormones responsible for growth and development are released. Not only is sleep crucial for healthy mental and physical development but a lack of sleep has also been linked to headaches and can trigger migraines episodes.

Toddlers and pre-school children should get around 11 – 14 hours of sleep, children in primary school 9 – 11 hours and teens about 8 – 9 hours of sleep per day. If you are concerned about the amount of sleep a child is getting, you might try the following tips to encourage healthy sleeping patterns in children:

- Ensure a consistent bedtime routine. It doesn't matter what the routine is, as long as it involves the same steps in the same order at the same time every night.
- Encourage the use of a security object, such as a soft toy or favourite blanket for smaller children.
- Active children sleep more, so make sure children get enough physical exercise during the day.
- Darkness stimulates the secretion of hormones that induce sleep and it is therefore better for children to sleep in a dark room. If a child is afraid of the dark, it might help to keep on a small light during the night, but make sure that it generates as little light as possible.
- Keep track of the amount of caffeine children are consuming during the day and limit it as far as possible.
- Make sure children are not watching television or playing computer games right before going to bed as this has been linked to difficulty in falling asleep, nightmares, as well as reduced quality of sleep.

► **Strain on the eyes**

Spending a lot of time in front of the television or computer not only reduces activity levels during the day or impacts sleep patterns, but it can also put a lot of strain on the eyes, causing headaches. Make sure children don't sit too close to the screen or use electronic equipment in a dark room. The glare of a tablet, computer screen or television in a dark room may put too much strain on the eyes, leading to headaches. These kinds of headaches are usually behind the eyes or in the region of the forehead.

If a child is constantly complaining of headaches after a school day or after certain activities like reading or watching television, it might be best to consult an optometrist for an eye test.

► **Stress and stressful situations**

As adults, we tend to see childhood as a carefree and stress-free time, but this is not the case. Children often feel overwhelmed by life stressors, such as the social demands of trying to fit in, academic pressures or simply being

too busy with extramural activities. Not to mention the extra stress caused by an unhealthy environment such as violence, abuse and bullying.

And stress can cause very real pain.

There is a general misconception that pain caused by stress is not real pain. However, when you experience a stressful situation, stress hormones are secreted with the main function to enable you to fight the stressor or flee from it. In a fight or flight situation, you don't need to digest food or even think about the situation, you just need to act with the big muscles in your arms and legs. For this reason, the stress hormones work with the body to increase the heart rate and to allow more blood flow and activity to the arms and legs, and less to the digestive system and brain. The altered blood flow and activity in the digestive system and brain can therefore cause very real stomach pain and headaches during times of stress. Headaches can also be brought on by tense muscles in the neck and shoulders.

Tension causes mild to moderate pain on both sides of the head and is often described as a tight band around the head. If the neck muscles are involved, the pain can be more towards the back. It is not a throbbing kind of pain and it also does not include any nausea or vomiting.

Another cause for headaches that might be stress related is the grinding of teeth while sleeping. Headaches caused by teeth grinding will be worse in the mornings and you will also be able to hear the sound of teeth grinding when a child is sleeping. Your child will wake up with the headache, but it should not get worse when he/she sits upright, nor should it be accompanied by nausea and/or dizziness. If this is the case, please consult your doctor. If the teeth grinding is severe, you may want to take your child to the dentist for a consultation to relieve the symptoms with a mouthpiece and to protect the teeth.

If children experience tension headaches, the first thing that you can do to help is to acknowledge the fact that they are experiencing stress and that it is influencing their daily life. Encourage them to talk about their fears and listen to them. See if you can identify the triggers and work with the child to try and find a solution. It might be time to reconsider the number of activities that they are participating in, or maybe there is a problem at school with a teacher or fellow student that is causing extra stress and needs to be addressed. Resist

the urge to take over and fix every problem, but rather encourage children to come up with solutions in order to teach them effective coping strategies.

If you suspect that a child feels overwhelmed by stress, it might be helpful to consult a therapist, who can teach the child coping strategies so that he/she will be able to cope with stress from a young age.

Other strategies that you can attempt to combat tension headaches:

- Physical exercise can be great to reduce the levels of stress hormones in the body and in this way combat stress and help to relieve the headache. However, activity must be stopped if the headache gets worse. This might be an indication that the headache is not tension related, and you must investigate further to find the reason for the headache.
- If the muscles in the neck and shoulders are tense, gentle massage and the application of a heat pack can do wonders to relax the muscles. Refer to the information in the previous chapter on the application of heat.
- Encourage children to relax – refer to the information in the previous chapter on relaxation.

► **Motion sickness**

Children are very susceptible to motion sickness. The most common symptom of motion sickness is nausea and/or vomiting, but sometimes it includes headaches. If your child complains of a headache (with or without nausea and vomiting) after riding in a bus or car, it might be that he/she suffers from motion sickness.

Motion sickness is caused when the brain receives a different signal from the eyes than from the sensitive part of the inner ear that detects movement. In other words, your eyes don't see the movement your brain is experiencing. Visual problems can make things worse, so be sure to check the child's eyesight. Encourage children to look out of the window to the furthest point visible. You can always play a game by seeking for objects in the environment to encourage children to look out of the window. A doctor can also prescribe medication that can combat motion sickness.

► Migraine episodes

Migraine is regarded as a primary headache as it is not a symptom of another disease. Even infants can suffer migraine episodes and it is possible that, what is sometimes perceived as colic, might actually be a migraine attack. According to the Migraine Research Foundation,¹⁴ up to a half of migraine sufferers had their first migraine episode before the age of twelve years.

The pain during a migraine episode can be described as a throbbing or pulsating kind of pain that is getting worse. It is usually on one side of the head and is accompanied by nausea, vomiting and/or dizziness. Children can experience visual disturbances such as a blind spot, flashing lights or moving dots in front of the eyes, and they can become very sensitive to certain smells, bright lights, sounds or touch.

It might be a good idea to keep a pain diary as explained in Chapter 2. Migraine episodes can be triggered by stress, skipping meals, changes in sleeping patterns or certain foods, such as nuts, coffee or chocolates. The pain diary will be able to help you identify the triggers.

Some parents take their child to an emergency room for treatment every time he/she experiences a migraine. However, it is best to also make an appointment with your own doctor so that a migraine treatment plan can be established. Sometimes migraine episodes can be prevented or can be turned around early in the process. Your doctor will also be able to give you the best advice for your child and ensure that there is no other underlying reason for the episodes. Remember to take your pain diary with you.

REMEMBER

If none of the above are applicable to a child, and you've been to the doctor to make sure that there is no other medical reason for the headaches, it might be beneficial to contact a professional who specialises in chronic pain. This person can help your child cope and live an active life despite the pain.

Stomach pain

Besides headaches, stomach pain is one of the most frequent complaints of children and it is just as challenging to find the reason for the pain. Sometimes even something like a throat infection can also cause stomach pain.

If children are complaining of stomach pain waking them up at night, the pain continues for a few days or is accompanied by any other symptoms such as a noticeable lump or swelling, nausea, vomiting, loss of appetite, fever, diarrhoea, frequent urinating or pain when passing urine, you should consult your doctor as soon as possible. For instance, something like appendicitis is a medical emergency that needs immediate attention. Children can also dehydrate very quickly and if a child has diarrhoea and is vomiting at the same time, it is best to consult a doctor.

Keep in mind that a child may be hiding an injury like a blow to the stomach. There are various reasons why children will not be honest about such an injury. It can be because they did something they were not supposed to do and are now keeping quiet because they are afraid of being punished. It can also be because the child has been bullied and is too ashamed to admit it, or even abused by an adult and threatened to keep quiet. Look out for other marks and bruises and ask the child about any injuries in a casual, non-threatening way.

If you don't suspect any underlying medical condition responsible for a child's stomach pain, consider one of these most common causes listed below:

► Stress

In the same way that stress can cause headaches, it can also cause stomach pain. As explained previously when we've discussed headaches, stress causes a reduction in the blood flow and activities in the digestive system, resulting in pain and stomach cramps. Keeping a pain diary as described in Chapter 2 will help you determine stressors in a child's life that can precipitate the pain.

The best way to combat this kind of pain is to encourage children to relax. Refer to the section in the previous chapter on relaxation. You can also apply a heat pack to the stomach to increase blood flow to the area and to relax the muscles. Small frequent meals can also help to aid a child's digestion.

► Constipation

Constipation is a common problem in children and can go undetected, especially if they are in a care centre during the day. Keep an eye on your child's toilet habits or ask the child's caretaker to check. Knowing that a child is going to the toilet once a day – or even several times a day – is not enough. Children can still be constipated and only have small amounts of watery stools pushing past an impacted, constipated mass, and this can even be mistaken for diarrhoea. Stools should be an adequate amount, medium size and soft, and not too big or formed like small pebbles. Bigger children can be asked if it hurts when they go to the toilet.

Some children get so constipated that they must receive medical attention to get their stomach going again. If a child is complaining of stomach pain, his/her stomach is bloated, and there is not a sufficient bowel movement at least once a day, you probably have to pay your doctor a visit.

There are several reasons why children get constipated, and one of them could be that they don't want to go to the toilet. This may be because a previous episode of constipation was painful and created a fear of going to the toilet. It might also be that children dislike going to toilet at school, or that they are not allowed to go when they need the toilet. Pre-school children should always be allowed to go to the toilet any time during the day.

Another cause of constipation is an inadequate amount of fibre and water in the diet. Make sure that children eat enough fresh fruit and vegetables, high-fibre bread and cereals, as well as yoghurt. And don't forget the fluids! If you give your child a high-fibre diet without enough water, you can make the problem worse. For babies older than six months, you can add a small amount of prune juice to their diet and slowly increase it till the constipation is cleared.

Always consult your doctor or pharmacist before giving a child medication for constipation.

► Diet

Sometimes the food a child is eating can cause indigestion and stomach ache. We all know to stay clear of junk food and fizzy drinks, but it is just so much easier to grab a quick take-away on your way home after a busy day. Just make sure that it is the exception and doesn't become the norm in your house, and

that the child's stomach pain is not related to junk food and/or fizzy drinks. The culprits that are usually responsible for a stomach ache are a high-fat diet, fizzy drinks, lots of sugar and spicy foods.

However, it may also be the food that we cook with the best of intentions that can cause stomach ache. Maybe a child cannot tolerate some of these foods in his/her diet. Food intolerance is not the same as a food allergy. If children are allergic to something in their diet, their immune system will start to react and this can cause symptoms such as a skin rash, tingling and swelling of the tongue and throat and even breathing problems – warranting an immediate visit to your doctor or emergency room. Food intolerance, on the other hand, causes digestive problems such as bloating, diarrhoea and, of course, cramping and stomach pain. Culprits which cause food intolerance are usually substances like lactose and wheat, but it can be something else as well. If a child is frequently complaining of stomach pain, start a pain diary and keep a record of the child's diet to determine if certain foods are causing pain.

It can also be that a child is not chewing food properly. Make sure that the food you give to children is properly mashed or cut up according to what they can tolerate for their age, and that you give a child enough time to eat and to chew the food properly. Also monitor the emotions around the dinner table and make sure that mealtimes are enjoyable and relaxing.

► Period pains

This is not something that you might expect in a book about pain in children, but some girls may experience period pains from a very young age, and if you keep in mind that girls can start menstruating from as young as nine years old, this is definitely a problem worth mentioning here. In the beginning of menstruation, a girl's periods are not regular, but as soon as she starts with regular periods, it can also become painful.

Period pains are usually on one side of the stomach below the navel and the pain sometimes spreads down the leg. It can start before or during menstruation and last from one to a few days. The uterus is contracting to get rid of the blood during menstruation, which is causing the pain. As the uterus is also a muscle, applying a heat pack works very well in relaxing the uterus and combating pain.

Consult your doctor if the child's pain is causing her to miss school and is limiting activities.

► Sore muscles

Something simple that is often overlooked, are sore muscles. Because we as adults associate sore muscles with a strenuous workout, we tend to forget that children get a lot of exercise from active play, and they can also be stiff from overusing some muscles. In general, the children of today are not getting enough exercise and the muscles in their stomach and back are not as strong and flexible as they should be. Stomach and back pain can also be the result of a poor body posture. If a child has been very active with activities he/she is not used to, chances are that complaints of stomach pain can be due to sore muscles. You can apply some heat on the sore area to relax the muscles. However, if this does not help or the pain is severe, your child might have a more serious injury and you should rather pay your doctor a visit. You can also consult a physiotherapist or biokineticist specialising in children so that you can explore rehabilitation techniques and prevent future injuries.

REMEMBER

If none of the above are applicable to your child, and you've been to the doctor to make sure that there is no other medical reason for the stomach pain, it might be beneficial to contact a professional who specialises in chronic pain. This person can help your child cope and live an active life despite the pain.

Cancer

If your child has been diagnosed with cancer, it is normal to feel scared and overwhelmed with everything that is happening. Remember to take care of yourself as you are your child's most important support. Find someone you can talk to or seek professional help if you feel that you cannot handle the situation.

Unfortunately, there are several misconceptions about cancer. First, cancer is not a death sentence, and the majority of children survive cancer and lead long and productive lives. In the second place, there is a belief that cancer is very painful, but fortunately this is not necessarily the case. There have been major developments lately, not only in treating cancer more effectively, but also in adequately managing the pain associated with the disease.

Let's look at what could potentially cause pain when someone has been diagnosed with cancer and what can be done about it.

► Pain from the disease

Cancer can potentially be painful and there are different causes for the pain. When a tumour is growing, it can displace surrounding soft tissue or put pressure on rigid tissue such as bone. A tumour can also cause damage to the surrounding nerves, resulting in an increase in pain impulses being sent to the brain. With leukaemia, the bone marrow can get overcrowded with cancer cells and this can cause bone and joint pain.

It is important to explain the disease to the child in a way that he/she can understand. Misconceptions can create unnecessary fears and increase the pain experience. Try to stay positive and focus on the help and support the child will get.

Pain caused by the disease can be treated with medication. Parents are often concerned that a child will get addicted to pain medication, especially if it is strong medication such as morphine. Addiction is a psychological dependence on drugs that will cause a craving for the drug, irrespective of whether the person is experiencing pain. If medication such as morphine is given responsibly to treat physical pain, there is no need to be concerned about addiction. However, children might get physically dependent on a drug if it has been used for a long period of time, which is not the same as addiction. Dependence is a physiological response of the body and can cause withdrawal symptoms if the drug is stopped suddenly. For this reason, the dosage of morphine will be slowly decreased if no longer needed, until it can be stopped altogether. One of the side effects of morphine that can be troublesome is constipation. Your doctor will probably prescribe a stool softener when a

child is on morphine, but it is also important that you encourage him/her to drink adequate fluids throughout the day.

In addition to medication, distraction and relaxation techniques can be very successful in managing pain caused by cancer. As mentioned earlier, fear, anxiety and even depression can cause an increase in pain. Explain to children what is happening every step of the way and include them in all the discussions. If you are concerned that a child is not coping, consult a therapist who can help the child through the process. With adequate support, it is possible for a child to grow stronger through this experience and to learn coping skills that can help him/her in future.

► Pain from the treatment

The treatment of cancer can also cause pain. An operation is usually inevitable, if not to remove a tumour, then for a biopsy of the tumour or to have a special kind of line inserted through which chemotherapy can be given. Even though the incision for a biopsy or line placement is small, it can still hurt. Refer to the section earlier in this chapter on managing pain after an operation.

Some of the medications that a child must take can have side effects such as constipation, causing stomach pain. Others can cause headaches, sores in the mouth or temporary damage to the nerves that can also be very painful. You can help a child by explaining that the chemotherapy and other treatments are helping to fight against the cancer cells (bad guys) in the body. Never refer to the chemotherapy as 'poison' or bad medicine, as this will increase the child's fear and apprehension of the treatment.

You can explain it like this: *'The good soldiers in your body are fighting against the bad guys (cancer cells) in your body. The doctor is helping you by giving the soldiers in your body some weapons (the medication) to fight against the bad guys. It is the fighting in your body that is making you sick, not the medication itself.'*

Even though your child is in the care of a whole team of medical professionals, you still have a job as Pain Investigator to help the team identify side effects so that they can be treated to ensure that your child does not suffer unnecessary pain.

D Pain from medical procedures

Unfortunately, cancer treatment also involves numerous procedures that are often painful. Refer to the section earlier in this chapter on medical procedures for more information on how to make these procedures as painless as possible for children. If a child is not coping with recurrent procedures, please contact a therapist who can assist the child.

Repeated procedures can be challenging for children, and it is important to give positive feedback right from the beginning in order to boost children's perception of how they coped with a procedure. Something that I've found to be effective in my work with children being treated for cancer, was to give them different beads for different procedures. Buy a few packets of different coloured beads and give the child a different colour bead after each procedure, such as drawing blood, getting a dose of chemotherapy, putting up a drip or even one for every night he/she had to stay over in hospital. You can string the beads or use them in a creative art project. Not only do the beads serve as an incentive after each procedure, but showing off the beads to family and friends is just another way of making the abstract concept of this illness more concrete for a child.

HIV/AIDS

Children who contract the Human Immunodeficiency Virus (HIV) must cope with stigma and ridicule. They are often orphaned when they are abandoned after birth or when a parent dies. Sometimes they are the victims of rape or sexual molestation. All of this can cause considerable stress and anxiety in a young child, aggravating any pain he/she might experience. When HIV causes Acquired Immunodeficiency Syndrome (AIDS), it can potentially cause much pain, such as headaches, nerve pain, muscle spasms, joint pain, pain of the liver and spleen, and painful sores in the mouth and other areas of the body. Often children complain about generalised pain without being able to localise it.

If a child has been diagnosed with HIV/AIDS, make sure that you receive help from professionals and/or adequate social support to be able to cope with the situation, and to give much needed support to the child. You can also

discuss the kind of information that you must give to your child and how to disclose the fact that he/she has HIV/AIDS.

HIV is not curable, but it is treatable. The main challenge is to get children to take their medicine every day to keep the illness at bay and help to prevent pain. Refer to Chapter 3 on how to get a child to take medicine. Explain to the child that the medicine is meant to keep the bad guys (HIV) from multiplying and to increase the good soldiers (the body's own CD4 cells) and make them stronger. Children have to take their medicine every day, even if they feel great.

Look out for any signs of pain as explained in Chapter 2 and discuss it with your doctor. Children with advanced illness often experience different kinds of pain from various sources. You can experiment with the following techniques, but make sure that you also have adequate pain medication available.

- ▶ Distraction.
- ▶ Relaxation, including gentle massage. However, keep in mind that these children may sometimes experience allodynia, a disorder where a gentle touch can be experienced as painful.
- ▶ Apply heat to sore and stiff muscles and a cold pack to painful and swollen joints.
- ▶ For smaller babies, swaddling, facilitated tucking and kangaroo care can be effective in calming the baby and making him/her feel secure.

