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Pain, Pain, Go Away! Evidence-Based Review of Developmentally Appropriate Pain Assessment for Children in a Postoperative Setting

Lisa Joestlein

Assessment and management of pain in children with orthopaedic injuries can be difficult, especially in the postoperative period. Factors such as developmental stage of the child, medications used intraoperatively and postoperatively, patient anxiety, and perceptions of family members and nurses caring for the patient can affect the accuracy of pain assessment in this population. The purposes of this article were to provide an overview of developmentally appropriate pain assessment tools, to describe factors that can affect the perception of pain, and to perform a pain assessment postoperatively in the pediatric orthopaedic patient.

Assessment of pain in children can be difficult, especially in the postoperative period following orthopaedic surgery. Pain is a subjective, multidimensional experience involving physical, social, and emotional factors (Joint Commission on Accreditation of Healthcare Organizations, 2011). Unlike other assessment findings such as heart rate, blood pressure, or temperature, there is no objective tool to measure pain. Nurses rely on subjective pain assessment tools that measure behavioral or sensory (self-report) components of pain. Self-report of pain is considered to be the most accurate measurement of intensity of pain. However, developmental age or a chronic condition such as cerebral palsy or autism may prevent a child from self-reporting pain. In addition, the effects of sedation, analgesics, and anesthetics may hinder a child's ability to self-report pain.

Approximately two thirds of boys and almost half of girls will have a fractured bone before the age of 15 years (Drendel, Lyon, Bergholte, & Kim, 2006), even more will have other musculoskeletal injuries requiring surgery, making orthopaedic procedures under general anesthesia one of the most common types of surgeries in children. Accurate pain assessment is essential to pain management in pediatric patients recovering from orthopaedic procedures and extends past the immediate postoperative period. Inadequate pain management can have both short- and long-term effects to include extended hospital stay, slower healing, emotional trauma, and reduction of effectiveness of analgesia in future procedures (Ali, Drendel, Kircher, & Beno, 2010).

The American Academy of Pediatrics' position statement on the assessment and management of acute pain in infants, children, and adolescents states that "suffering occurs when the pain leads the person to feel out of control, when the pain is overwhelming, when the source of pain is unknown, when the meaning of pain is perceived to be dire and when the pain is chronic" (American Academy of Pediatrics and American Pain Society, 2001, p. 1; Joint Commission on Accreditation of Healthcare Organizations, 2011, p. 1). In the postoperative period, the effects of anesthesia and other medications combined with surgical pain can lead feelings of a lack of control and overwhelming pain in children. During the assessment of postoperative pain, nurses need to distinguish between the emotional and physical components of pain to manage it effectively. The purposes of this article were to provide an overview of developmentally appropriate pain assessment tools, to describe factors that can affect the perception of pain, and to perform a pain assessment postoperatively in the pediatric orthopaedic patient.

Pain Assessment Tools Used in Children

There are two types of pain assessment tools used in children—behavioral and sensory. The American Society for Pain Management Nursing (ASPMN), in its position statement on pain assessment, recommends using a modified Hierarchy of Pain Assessment Techniques consisting of four steps: obtain self-report,

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search for potential causes of pain, observe patient behaviors, and elicit proxy reporting when assessing for pain (Herr, Coyne, McCaffrey, Manworren, & Merkel, 2011). The original hierarchy was developed by Pasero and McCaffery as a six-item protocol for pain assessment in patients who could not self-report and included two additional steps: document the reason self-report could not be used and plan of managing pain (Pasero & McCaffrey, 2005). If possible, self-report of pain is the first step in the ASPMN Hierarchy of Pain Assessment Techniques (Herr et al., 2011). However, in infants, toddlers, and some preschoolers, the use of a self-report pain assessment tool is not appropriate. Infants are unable to speak and thus unable to self-report. Self-report pain assessment scales require sequential thinking and an understanding of *greater than* and *less than* concepts. Approximately 40% of children 5–6 years old cannot grasp these concepts and have difficulty using the self-report assessment tools. As a developmental group, toddlers and preschoolers engage in dichotomous thinking and will pick the extremes of a Likert scale, thus making assessment of pain intensity difficult using these tools (Drendel, Kelly, & Ali, 2011).

Behavioral Pain Assessment Tools

Behavioral tools use objective measurements of defined behaviors that are associated with a reaction to pain and are typically used in preverbal children. Crying, facial grimacing, and posturing are common behaviors used to measure pain in these assessment tools. The Children's Hospital of Eastern Ontario Pain Scale (Bringuier et al., 2009; Suraseranivongse, Santawat, Kraiprasit, Petcharatana, & Muntraporn, 2001), Children's and Infants' Postoperative Pain Scale (Alves et al., 2008; Bringuier et al., 2009), COMFORT Behavior Scale (Van Dijk et al., 2000), and the Faces, Legs, Activity, Cry, and Consolability Observational Tool (FLACC) (Bringuier et al., 2009; Manworren & Hynan, 2003) have all been validated in the literature for assessment of postoperative pain (Cohen et al., 2008; Drendel et al., 2011; Herr et al., 2011; Voepel-Lewis, Zanotti, Dammeyer, & Merkel, 2010) (see Tables 1 and 2). The COMFORT behavior scale has been validated for use in children from neonate to 3 years of age while the Children's and Infants' Postoperative Pain Scale can be used from birth to 5 years of age. The Children's Hospital of Eastern Ontario Pain Scale and FLACC assessment tools can be used in children from infancy through adolescence (Herr et al., 2011). A modified version of the FLACC pain assessment tool (revised FLACC or rFLACC) (Chen-Lim et al., 2012) has been found to be a reliable pain assessment tool for cognitively impaired children from 4 to 19 years of age (Chen-Lim et al., 2012; Drendel et al., 2011).

Table 1. Behavioral Pain Assessment Tools

Type	Brief Description	Ages (Years)
Children's Hospital of Eastern Ontario Pain Scale	Observational tool for measuring postoperative pain with 6 categories of pain behavior with 3–4 levels	1–7
COMFORT Scale	Observational tool for measuring pain, including surgical pain in an intensive care unit setting. Has eight categories of pain behavior with five levels	0–3
FLACC Scale	Observational tool for measuring pain to include postoperative, hospital and procedural pain. Has five categories of pain behavior with three levels	0–18
Children's and Infants' Postoperative Pain Scale	Observational tool for measuring postoperative pain with five categories of pain behavior with three levels	0–5

Note. Data from Alves et al. (2008); Bringuier et al. (2009); Cohen et al. (2008); Drendel et al. (2011); Herr et al. (2011); Manworren and Hynan (2003); Suraseranivongse et al. (2001); Van Dijk et al. (2000); and Voepel-Lewis et al. (2010).

Sensory Pain Assessment Tools

Self-report pain assessment tools can be used in school-aged children and adolescents. The Wong-Baker FACES Pain Rating Scale (Fogel Keck, Gerkensmeyer, Joyce, & Schade, 1996; Garra et al., 2009), Faces Pain Scale–Revised (FPS-R) (Connelly & Neville, 2010), and the OUCHER scale (Beyer & Aradine, 1987; Beyer, Denyes, & Villarruel, 1992) are pictorial-based pain scales that are developmentally appropriate for younger school-aged children and have been substantiated in the literature (Cohen et al., 2008; Connelly & Neville, 2010; Drendel et al., 2011). The FPS-R (see Figure 1) and the Wong-Baker (see Figure 2) scales use gender neutral faces with facial expressions of increasing pain using a scale of 0–10 (FPS-R) with 0 being no pain and increasing to 10 being the worst pain. The OUCHER scale uses photographic faces and is available in six culturally sensitive faces. The OUCHER scale, like the Wong-Baker, uses a numeric scale; however, it ranges from 0 to 5 with 0 being no pain and 5 being the worst pain.

The Visual Analog Scale (VAS) (see Figure 3) has been verified in the literature for use in children over the age of 8 years (Cohen et al., 2008; Connelly & Neville, 2010; Drendel et al., 2011). Using this scale requires the ability to seriate (determining sequential order) and abstract thought (Cohen et al., 2008; Drendel et al., 2011). Unlike the other self-report tools described, the VAS does not use pictures of faces but a premeasured line to estimate pain intensity. Most VAS scales use anchor words at the ends of the scale such as "no pain" and "worst pain." Some VAS scales have additional descriptive words or numbers such as 0–10 or 0–100. The child marks the intensity of pain on the scale. All of the sensory pain assessment tools described in this article have been found to be reliable in

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TABLE 2. BEHAVIORAL PAIN ASSESSMENT TOOLS

Tool	Authors/Developers of Assessment Tool	Characteristics	Available Versions
Children's Hospital of Eastern Ontario Pain Scale (CHEOPS)	McGrath, P. J., Johnson, G., Goodman, J. T., Schillinger, J., Dunn, J., & Chapman, J. (1985). CHEOPS: A behavioral scale for rating postoperative pain in children. *Advances in Pain Research Therapy*, *9*, 395–402.	Consists of six categories of pain behavior: cry, facial, verbal, torso, touch, and legs rated between 0 and 2 in some categories and 1 and 3 in other categories. Scores range from 4 as no pain to 13 as the maximum score for pain	CHEOPS
COMFORT Scale	Ambuel, B., Hamlett, K. W., Marx, C. M., & Blumer, J. L. (1992). Assessing distress in pediatric intensive care environments: The COMFORT scale. *Journal of Pediatric Psychology*, *17*(1), 95–109.	Consists of eight categories of pain behavior: alertness, calmness/agitation, respiratory response, physical movement, blood pressure, heart rate, muscle tone, facial tension rated between 1 and 5. Pain score ranges from 8 to 40, with 8 as no pain and 40 being maximum pain. Requires 2 minutes of observation to adequately score pain.	COMFORT Scale
Faces, Legs, Activity, Crying, and Consolability Pain Scale (FLACC)	Merkel, S., Voepel-Lewis, T., & Malviya, S. (1997). The FLACC: A behavioral scale for scoring postoperative pain in young children. *Pediatric Nursing, 23*(3), 293–297.	Consists of five categories of pain behavior (facial expression, leg movement, type of activity, level of crying, and consolability rated between 0 and 2). Pain score ranges from 0 to 10, with 0 as no pain and 10 as a maximum score for pain	FLACC, rFLACC
Children's and Infants' Postoperative Pain Scale (CHIPPS)	Büttner, W., & Finke, W. (2000). Analysis of behavioural and physiological parameters for the assessment of postoperative analgesic demand in newborns, infants and young children: A comprehensive report on seven consecutive studies. *Pediatric Anesthesia, 10*(3), 303–318.	Consists of five categories of pain behavior: crying, facial expression, posture of trunk, posture of legs, and motor restlessness rated between 0 and 2. Pain scores range from 0 being no pain to 10 as the maximum score for pain	CHIPPS

pediatric patients in the postoperative period (see Tables 3 and 4).

Comparison of Behavioral Versus Sensory Tools

Unlike the behavioral assessment tools, the self-report assessment tools measure the sensory, not behavioral component, of pain. Pain scores using a behavioral assessment tool may not correlate with pain scores using a self-report tool (Herr et al., 2011). It is important for the nurse to document which pain assessment tool is used, especially in the postoperative area, where the patient's ability to self-report can change because of the effects of anesthesia, analgesics, and sedation. Patients unable to use a self-report pain assessment scale initially may be able to do so later in the recovery period as the effects of intraoperative medications wear off. Documentation of the change of pain assessment tools can explain a sudden difference of pain scores. Both behavioral and self-report pain assessment tools are limited to measuring the intensity of pain, and further assessment is needed to determine the location, duration, and quality of pain.

Pain Assessment Is More Than a Number

The pain assessment tools previously mentioned only measure pain intensity; these tools do not assess location, duration, or quality of pain. The ASPMN position statement on pain assessment without self-report suggests searching for potential causes of pain as the second step of the Hierarchy of Pain Assessment Techniques

FIGURE 1. Faces Pain Scale–Revised (FPS-R). www.iasp-pain.org/fpsr. Copyright © 2001, International Association for the Study of Pain®. Reproduced with permission. *Note*. Please note instructions for use of this scale, per IASP: "These faces show how much something can hurt. This face [point to left-most] shows no pain. The faces show more and more pain [point to each from left to right] up to this one [point to right most face]–it shows very much pain. Point to the face that shows how much you hurt [right now]." Score the chosen face 0, 2, 4, 6, 8, or 10, counting left to right, so '0' = 'no pain' and '10' = 'very much pain.' Do not use words like 'happy' and 'sad.' This scale is intended to measure how children feel inside, not how their face looks.

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FIGURE 2. Wong-Baker Pain Scale. ©1983 Wong-Baker FACES® Foundation. Used with permission.

(Herr et al., 2011). The surgical site or site of a fracture is an obvious source of pain, but assessment for causes should not stop there. Pain from positioning intraoperatively for long periods can also be a source of pain. Incorrect positioning after surgery can place undue stress on the surgical site. Elevation of the affected leg with the foot dangling in an anterior cruciate ligament repair with a knee immobilizer can cause increased pain in the affected knee. Orthopaedic appliances such as braces, knee immobilizers, and casts can rub or put pressure on other parts of the body causing pain in areas other than the surgical site. Hardware, such as flexible nails protruding out of the affected bone, can be a cause for pain. Complications from surgery such as compartment syndrome also can lead to increased pain. Even something as innocuous as automatic noninvasive blood pressure monitoring can be painful. Children may not be able to verbalize because of throat pain from intubation. In the situation of a child unable or unwilling to verbalize the location of pain, ask the child to point to the pain. Even toddlers can point to the location of pain when asked. If the child is unable to point to the painful area due to physical limitations, the use of a picture communication board may be helpful in determining the location of pain. In a study conducted by Mesko, Beoglos Eliades, Christ Libertin, and Shelestak (2011) of use of a picture communication board in a postanesthesia care unit (PACU), the nurses indicated the location of pain to be the surgical site 81% of the time versus the children reporting the surgical site as the source of pain 20% of the time (Mesko et al., 2011). Nurses' assumptions of the source of pain are often incorrect and an accurate assessment of the source is essential. Incorrect assumptions of the location of pain can lead to inadequate pain management and additional injury to the patient. For example, a cast that is too tight needs to be identified before neurovascular compromise can occur. Assessment of location or cause of pain can affect the

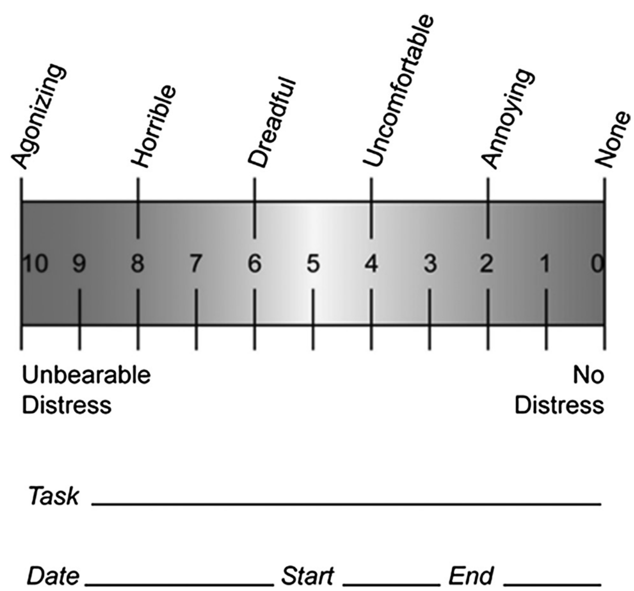

FIGURE 3. VAS Scale.

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Table 3. Sensory Pain Assessment Tools

Type	Brief Description	Age (Years)
Faces, Pain Scale-Revised	Self-report pain scale with six cartoon gender and ethnic neutral faces ranging from neutral or no pain to severe pain expression	4–16
OUCHER scale	Self-report photographic pain scale available in various ethnicities and gender ranging from 0 or no pain to 10, severe pain	3–12
Wong-Baker FACES Scale	Self-report pain scale with six line drawn gender and ethnic neutral faces ranging from *neutral* (0) to *severe pain* (10). Unlike the FPS-R, also includes descriptive words under faces ranging from "no hurt" to "hurts worst."	2–10
Visual Analog Scale	Self-report analog pain scale. Either horizontal or vertical line with descriptive pain anchors at endpoints—some scales will include the use of color or additional descriptive words.	3–adult

Note. Data from Beyer and Aradine (1987); Beyer et al. (1992); Cohen et al. (2008); Connelly and Neville (2010); Drendel et al. (2011); Fogel Keck et al. (1996); and Garra et al. (2009).

choice of pain management therapy and should be determined when the child's condition allows it.

In the postoperative period, children often are drowsy and disoriented and have blurred vision from the anesthesia, analgesics, and amnesiacs given intraoperatively. Although developmentally appropriate, the use of a sensory-based pain assessment tool such as the VAS or the Wong-Baker pain scale may prove difficult. The patient may not be "awake" enough to give a numeric value to the pain or, because of medications or lack of corrective lenses after surgery, may not be able to see the assessment tool clearly enough to point to or verbalize a pain score. The nurse should identify and address pain issues despite a child's inability to give a numeric pain score.

Observation Is a Crucial Step to Assessment

The third step of the Hierarchy of Pain Assessment Techniques in the ASPMN position statement is observation of patient behaviors. Using a behavioral pain assessment tool in a child too sedated or drowsy from anesthesia is appropriate until the child is able to self-report. A caveat in the postoperative child is often that the medications used for analgesia in surgery wear off faster than the medications used for anesthesia. Sleeping or drowsiness does not indicate that a child is not in pain. Children may also attempt to control pain by sleeping or withdrawing behavior (Herr et al., 2011). Postoperative children who fall back to sleep after verbalizing that they are in pain should have their pain issues addressed with either nonpharmacologic or pharmacologic methods.

When describing a self-report pain assessment tool to a child, use developmentally appropriate terms. Identifying the terms the child uses to describe pain preoperatively and documenting them in the chart can help the nurse assess pain postoperatively. Most children under the age of 9 use words such as "ow," "ouchie," "owie," or hurt to describe pain. The word *pain* is not

Table 4. Sensory Pain Assessment Tools

Tool	Authors/ Developers of Assessment Tool	Characteristics	Available Version
Faces, Pain Scale–Revised	Hicks, C. L., von Baeyer, C. L., Spafford, P. A., van Korlaar, I., & Goodenough, B. (2001). The Faces Pain Scale–Revised: toward a common metric in pediatric pain measurement. *Pain*, *93*(2), 173–183.	Revised from the Faces, Pain Scale to a range of 0 to 10. Pain score ranges from 0 being no pain to 10 being the maximum pain score. Scale is gender and ethnic neutral.	Through the International Association for the Study of Pain, the FPS-R is offered in 65 languages currently
OUCHER Scale	Knott, C., Beyer, J., Villarruel, A., Denyes, M., Erickson, V., & Willard, G. (1994). Using the Oucher: Developmental approach to pain assessment in children. *MCN*, *19*, 314–320.	Consists of a numeric scale for older children ranging from 0 to 100 with 0 being no pain and 100 being maximum pain or a photographic scale ranging from 0 being no pain to 10 being maximum pain. Scale is gender and ethnic specific	Through Oucher.org, offered in both genders in five ethnicities currently
Wong-Baker FACES Scale	Wong, D., & Baker, C. (1988). Pain in children: Comparison of assessment scales. *Pediatric Nursing, 14*(1), 9—17.	Consists of a picture scale ranging from 0 to 10 with 0 being no pain, and 10 being the maximum pain. Scale is gender and ethnic neutral	Through the Wong-Baker Faces Foundation, offered in English and Spanish currently
Visual Analog Scale (VAS)	Scott, J., & Huskisson, E. C. (1976). Graphic representation of pain. *Pain, 2*(2), 175–184	Consists of a linear scale with descriptive pain anchors with "no pain" and "worst pain imaginable" used commonly. Was originally developed in psychology to measure feelings of well-being and was adapted in the 1970s for use in assessment of pain.	Through the AMDA—The Society for Post-Acute and Long Term Care Medicine, the VAS is available in English

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commonly used in children until they are much older (Drendel et al., 2011). Family members or caregivers can help by providing familiar terms. Although behavioral pain assessment tools are valid for pain assessment, often the same behaviors that indicate pain such as crying, grimacing, kicking, or squirming can also be related to fear, hunger, or anxiety. Pain is not just a physical experience but also an emotional one. Emotions such as fear or anxiety can increase the perception of pain and also need to be addressed to reduce pain sensation (Page et al., 2011; Trudeau, Lamb, Gowans, & Lauder, 2009).

Additional Factors That Affect Pain Assessment

In addition to the difficulty assessing pain due to the patient's developmental stage or age, there are other factors that can affect the assessment of pain in children postoperatively. Medications used intraoperatively and patient anxiety can affect the patient's response to pain. Family members' and nurses' beliefs about pain can affect their assessment of pain in children and lead to inadequate pain management.

Effects of Intraoperative Medications

Nurses caring for postoperative children in PACU or orthopaedic or surgical units need to be aware of the long-lasting effects of these intraoperative medications that can affect pain assessments. Upon arrival to the PACU, residual neuromuscular blockade can be present in approximately 40% of patients receiving an intermediate-acting neuromuscular blocking drug such as rocuronium and last for approximately an hour after reversal. The effects of residual neuromuscular blockade can cause muscle weakness, blurred vision, and difficulty speaking (Murphy et al., 2013).

Elimination of inhaled anesthetics is dependent on several factors: the type of anesthetic used, body mass index of the patient, and duration of exposure to the anesthetic. For example, halothane is more soluble in brain tissue and blood than sevoflurane, making the elimination of halothane slower and the effects longer lasting. Extended duration of exposure to inhaled anesthetics leads to a bigger accumulation in muscle, fat, and skin. Thus, a longer surgery may mean a longer recovery time. Inhaled anesthetics are eliminated from fat tissue at a slower rate than other tissues, and in obese patients, the effects of the anesthetics may last longer.

Certain intravenous anesthetics, such as benzodiazepines, have half-lives that are hours in duration (White & Trevor, 2009). These agents can affect the alertness and awareness of children and hinder their ability to self-report pain. Most of the inhaled and intravenous anesthetics do not have analgesic properties so drowsiness or sleep does not equate to effective pain management postoperatively. After leaving the stimulation of a busy PACU and return to a quiet patient room, the child may exhibit more of these effects, making pain assessment more difficult.

Family and Nurse Perceptions of Pain

Pain assessment should be a multifaceted approach utilizing self-report (when possible), observation, identification of potential sources of pain, and proxy reporting. When a child is unable to self-report pain, observation and interpretation of the child's behavior fall to the nursing staff and family members. Even when a child is able to self-report, pain is often underestimated by nurses and other health care providers. Nurses look for overt behaviors such as crying to indicate severity of pain and may dismiss or modify pain reported by the child based on observed behavior (Bauman & McManus, 2005; Drendel et al., 2011). Children with orthopaedic surgery quickly learn that moving the affected limb increases pain and thus may not have the expected pain behaviors such as writhing or flailing of limbs. Coping behaviors such as withdrawal, sleeping, or minimization by the child can lead to nurses dismissing or modifying pain reports. In the ASPMN position statement on pain assessment without self-report, the last assessment technique in the Hierarchy is proxy reporting. Family members or caregivers who know the child can identify behaviors that indicate the presence of pain and they "should be encouraged to actively participate in the assessment of pain" (Herr et al., 2011, p. 231). Family members should receive education on pain management and medications. Some family members' negative attitudes about pain medication, especially narcotic pain medication, may affect their assessment of children's pain. Dispelling fears of overdose, addiction, and potential side effects will lead to better pain reporting and advocacy from family members (LeMay et al., 2010). Self-reported pain should not be modified by nurses on the basis of behavioral observations. The child's pain score is what the child states; however, documentation can also reflect both the self-reported pain score and behaviors at the time of the self-report.

Patient Anxiety

Many children arrive to the PACU awake and anxious or fearful. "Surgery by its very nature causes pain, and the stress of being in an unfamiliar environment and awakening to changes in physical functioning can compound this sensation" (Gold et al., 2006, p. 160). There are many factors contributing to a child's fear or anxiety. Fear of strangers, fear of separation from parents, fear of dismemberment/loss of body parts, and loss of control can affect pain perception with children, depending on their developmental level. According to the American Society of Anesthesiologists Taskforce, absence of family members and unfamiliar surroundings can intensify the distress a child feels after surgery (American Society of Anesthesiologists Taskforce on Acute Pain Management, 2012). Young children are very concrete in their thought processes. A preschooler waking up from anesthesia, hearing that a nurse is "taking your blood pressure," may think that the nurse is actually taking something away from his or her body. The immobility of a hip spica cast and the use of diapers in a recently toilet trained toddler can cause a sense of loss

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of control and increased anxiety. In a school-aged or adolescent child, the inability of moving a limb due to a cast or brace can increase anxiety. The bright lights, the room that is different from the one the child was in before surgery, unfamiliar staff, the constant and sometimes loud noises of the monitors, alarms, and other children crying increase the anxiety and fear that a child may have. This anxiety and fear can increase the child's perception of pain.

According to Page et al. (2011), anxiety related to pain falls into three categories: anxiety sensitivity, pain anxiety, and pain catastrophizing. Anxiety sensitivity is the extent that anxiety-related symptoms such as tachycardia are interpreted as possible indicators of harmful outcomes (Page et al., 2011). Postoperative nausea can be categorized as a symptom causing anxiety sensitivity in children. Often children will report that they are in pain when they are nauseated. Pain anxiety concerns the reactions (physical and psychological) to the anticipation of pain (Page et al., 2011). Waking up from anesthesia with a pulsoximetry sensor that looks like a Band-Aid and an intravenous line taped to an extremity causes pain anxiety in children. Often when asked for the location of pain, the child does not point to the surgical site, but to the pulsoximetry sensor that is painless but, because of its appearance, the child feels that there must be an injury underneath. Pain catastrophizing is the extent that an individual worries, amplifies, or feels helpless about anticipated pain (Page et al., 2011). An example of this would be the anticipated pain that a child feels before the removal of a peripheral intravenous line. Because of the impact anxiety can have on a child's perception of pain, assessment of the postoperative child should include not only an assessment of pain but also anxiety or emotional distress the child may be having. Often the reduction of anxiety can reduce the sensation of pain a child is experiencing.

Summary

Orthopaedic injuries are one of the most common causes for surgery in children. Effective pain management is crucial to the recovery and rehabilitation from orthopaedic procedures. The key to effective pain management in the postoperative child is an accurate assessment of pain that can be quite challenging in the postoperative period. Pain is subjective involving emotional and social and physical factors. Utilizing the appropriate pain assessment tools is critical to an accurate assessment. However, pain assessment cannot stop with a numeric score on a pain assessment tool. For children, the emotional component of pain can be as distressing as the surgical pain. As nurses, it is our responsibility to alleviate both the emotional and physiologic aspects of pain. It is crucial to understand the factors that can affect the accuracy of the assessment of pain such as intraoperative medications, environment, developmental level, and patient anxiety. Awareness of these factors can increase the accuracy of pain assessment and improve pain management in the postoperative pediatric patient. By looking beyond the number to the whole assessment of pain, nurses caring for postoperative children with orthopaedic injuries will deliver better care to these vulnerable patients.

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