#### Abstract:

Strategies for controlling procedural pain and anxiety are critical in the pediatric patient. Evolving tools and techniques allow the pediatric acute care provider to have an array of pharmacologic and nonpharmacologic options to aid in procedural care. Optimizing noninvasive pain and anxiety management can help providers in urgent care and ambulatory settings to perform procedures that may otherwise require care in an emergency department or anesthesia suite. This article introduces the concept of a "PainLESS Practice"-an evidencebased, tiered approach to procedural pain and anxiety management in acute care. The goal of a PainLESS Practice is not necessarily to eliminate patients' pain, but rather, to reduce pain and anxiety to a level that is tolerable and facilitate the performance of procedures. We will discuss methods of procedural pain control in the pediatric acute care setting starting from less invasive and progressing to more invasive, keeping in mind that multiple modalities may be used simultaneously or in sequence. These techniques vary depending on the patient's age, procedure being performed, and the patient's individual circumstances.

#### **Keywords:**

pediatric; urgent care; acute care; pain control; analgesia; anxiety

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# Pain-Less Practice: Techniques to Reduce Procedural Pain and Anxiety in Pediatric Acute Care

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he ability to perform procedures is a critical skill in acute care. In pediatrics, this skill hinges on the ability to perform these procedures on patients who are often unable to cooperate. The success of a procedure hinges on the ability to reduce pain and anxiety, thereby setting the stage for a desirable outcome. In 1997, Schechter el al<sup>1</sup> described an "ouchless" pediatric inpatient unit. Several years later, Zempsky<sup>2</sup> described a "painless" pediatric emergency department (ED) setting the stage for a systematic approach to reducing pediatric pain in acute procedural care. This article discusses a strategic approach to procedural care for the pediatric patient. We will introduce the concept of a "PainLESS Practice," an evidence-based approach to procedural pain control in an acute care environment.

#### **PEDIATRIC PAIN**

The need to reduce pain and anxiety carries paramount importance in the pediatric patient. Failure to adequately address procedural pain may have long-lasting psychological and physiologic effects in children. Young patients who undergo painful procedures, including neonates, become hyperalgesic, resulting in increased levels of pain and anxiety in subsequent painful events.<sup>3</sup> In addition, effective pain control leads to higher patient and parental satisfaction, as well as decreased personnel needs, as patients are more cooperative and less anxious during procedures.<sup>2</sup>

Pain evaluation can be challenging in the pediatric population, especially in infants and nonverbal children. In infants and nonverbal children, observational scales can be used to evaluate pain, the most common of these being the "Revised Face, Legs, Activity, Cry, Consolability (r-FLACC)."<sup>4</sup> Younger children who are verbal may rate their pain using an analog scale that uses faces demonstrating increasing degrees of pain, and older children and adolescents may use a numerical rating scale.<sup>5</sup>

#### PAIN IN ACUTE CARE: URGENT CARE VS EDS

The approach to pain management is somewhat limited to the practice setting, but the vast resources of an ED are generally not necessary to achieve sufficient pain and anxiety control for most pediatric patients in need. Urgent care practices are a unique environment with some features and capabilities similar to an ED and others more comparable to an ambulatory setting. Like the ED, urgent cares are busy and the clinician may have limited time to perform a procedure. Many methods of procedural analgesia require 30 to 60 minutes to take effect, which provides a challenge to clinicians to find the physical space and time to use these methods. Many urgent cares lack the monitoring or credentialing to perform conscious or moderate procedural sedation. In addition, urgent cares may lack the ancillary staff capabilities, often operating without pediatric nurses or child life specialists.

Despite these relative limitations in urgent care settings, this environment may be ideal to control pain and anxiety when using consistent strategies for care. The urgent care provider, unlike the ED physician, is usually not overseeing hyperacute situations and thus may be better able to spend more time connecting with families and preparing a child for a procedure. Urgent care wait times are generally far less than those in an ED, which may decrease patient and family stress from time of arrival. There is often more dedicated private space in the urgent care environment which facilitates a low-stress, child-friendly environment for patients to receive pain control and wait for methods to take effect.

Fortunately, there are a multitude of options available to increase the odds of procedural success that can be applied to both the urgent care and ED setting. We advocate for a tier-based approach to procedural pain control, using the least invasive methods possible to adequately control pain and progressing to more invasive techniques as needed. Based on the provider's assessment, however, many of these "tiers" may be used simultaneously. These techniques will vary depending on the patient's age, procedure being performed, and the patient's individual circumstances. It is important to note that the goal of our PainLESS Practice is not always to completely eliminate the pain of our patients-rather it is to use the methods available to reduce pain and anxiety to a level that is tolerable, and to facilitate the completion of indicated procedures. It is the responsibility of the pediatric acute care provider to consistently and realistically set expectations for pain/anxiety control, through communication with parents, patients, and other family members. Table 1 outlines the tiers of procedural pain control methods that we will discuss-from least invasive to more invasive.

#### **TIER 1: NONPHARMACOLOGIC**

Pain and anxiety are typically present the minute a child enters a medical setting. Therefore, the first step is therefore to assure the environment has a child-friendly approach from the front- to back-end. Colorful walls, pictures, and a collection of toys and games help to minimize initial anxiety before beginning the procedure. It is also important to hide all instruments when possible. Even gloves, lights, and nonsharp metal objects can be scary to young children. A child-friendly approach facilitates the provider's initial assessment of the patient and permits an easier transition to the procedure.<sup>6</sup>

Subsequent steps should focus on nonpharmacologic techniques to prepare a child for a possibly painful procedure. Examples of these techniques include distraction, providing information about the procedure, positive reinforcement, and relaxation. The efficacy of nonpharmacologic techniques will vary by patient age and development, so it is important to assess a child's developmental stage Download English Version:

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