

PEDIATRIC PAIN MANAGEMENT WHITE PAPER

Why do we need such a protocol, and how do we assess pain in pediatrics?

Many organizations, including the National Association of EMS Physicians, the American College of Emergency Physicians, and Joint Commission have emphasized that the appropriate management of patients with pain must be a major priority in health care. In spite of this directive, pain management remains inconsistent and often inadequate, both in the field and in the ED.

Maine EMS is introducing a pediatric pain management protocol to address these issues.

How do we assess pain in the pediatric pain patient?

The protocol uses the FLACC Behavioral Pain Assessment Scale (Pediatric Nursing, 23 (3) 293-297)

One scores the patient based upon their behavior and appearance. A score of 0 would be relaxed and comfortable, 1-3 mild discomfort, 4-6 moderate pain, and 7-10 severe pain/discomfort.

FLACC Behavioral Pain Assessment Scale			
Categories	SCORING		
	0	1	2
Face	No particular expression or smile	Occasional grimace or frown; withdrawn, disinterested	Frequent to constant frown, clenched jaw, quivering chin
Legs	Normal position or relaxed	Uneasy, restless, tense	Kicking or legs drawn up
Activity	Lying quietly, normal position, moves easily	Squirming, shifting back and forth, tense	Arched, rigid, or jerking
Cry	No cry (awake or asleep)	Moans or whimpers, occasional complaint	Crying steadily, screams or sobs; frequent complaints

Another type of pain assessment scale is the “Wong-Baker Faces Scale”. The faces correspond to the numeric values from 0 – 5.

When administering pain medication, one should assess the patient’s pain level and vital signs prior to administering pain medication, periodically, and prior to repeat doses of pain medication.



IS FENTANYL SAFE TO USE IN PEDIATRICS?

Studies have shown that fentanyl can be used safely and effectively for pain management in the out-of-hospital setting (“Safety and Effectiveness of Fentanyl Administration for Prehospital Pain Management”, *Prehospital Emergency Care* 2006;10:1-7). In this study, fentanyl was effective in decreasing pain scores without causing significant hypotension, respiratory depression, hypoxemia, or sedation.

Fentanyl is rapidly absorbed (peak effect 2-3 minutes), and has a duration of action of about 30 minutes. You should follow correct dosing: 1 microgram/kg, with reassessments. If repeat dosing is needed, then use 0.5-1 microgram/kg titrated to a cumulative maximum dose of 5 micrograms/kg. The fentanyl can be given IV, IM, or IN. Of course, hypoxia and over sedation can occur, so monitoring the patients vital signs and oxygen saturation, and level of sedation, are important especially with repeat doses.

If using nitrous oxide, you should not use along with fentanyl because there is an increased likelihood of additive side effects.