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Optimizing the Treatment of Acute Pain in the Emergency Department

Approved by the American Academy of Emergency Nurse Practitioners, the Emergency Nurses Association, and the Society of Emergency Medicine Physician Assistants August 2017

A joint policy statement of the American College of Emergency Physicians, the American Academy of Emergency Nurse Practitioners, the Emergency Nurses Association, and the Society of Emergency Medicine Physician Assistants

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Replaces 2009 policy titled "Optimizing the Treatment of Pain in Patients with Acute Presentations" rescinded April 2017

The American College of Emergency Physicians seeks to improve acute pain management for patients in the emergency department (ED) and recognizes the need for prompt, safe, and effective pain management. **Although a very important topic, treatment of patients with chronic pain, especially those receiving hospice, palliative or end-of-life care, is beyond the scope of this document.**

Optimal acute pain management is patient-specific and pain syndrome-targeted when feasible, using a multimodal approach that includes pharmacological and non-pharmacological interventions. Base the assessment of pain and need for therapy on an overall accounting of patient status, including functional assessment, rather than solely on patient reported pain scores.

Acute Pain Management in the ED

Pharmacologic Treatments:

- Pharmacologic treatment of many acutely painful conditions should optimally begin with a non-opioid agent.
- Choose non-steroidal anti-inflammatory drugs (NSAIDs) based on their analgesic ceiling dose (which is lower than the anti-inflammatory maximal doses) and prescribe at the lowest effective dose for the shortest expected duration to avoid complications. Use NSAIDs with added caution in those with pre-existing renal insufficiency, heart failure, a predisposition to gastrointestinal hemorrhage, and in elderly patients.
- Oral (or rectal) acetaminophen is a good initial analgesic for mild-moderate pain. Intravenous acetaminophen (APAP) has similar effects as

Oral (or rectal) acetaminophen is a good initial analgesic for mild-moderate pain. Intravenous acetaminophen (APAP) has similar effects as oral, however is much more expensive, making it best reserved for those who cannot take medications by mouth or per rectum.¹

- Regional anesthesia (nerve blocks), with or without ultrasound guidance, may be used for certain acutely painful conditions, either alone or as part of a multimodal approach to pain relief.
- Administration of sub-dissociative dose ketamine (SDK) may be used either alone or as part of a multimodal approach to pain relief for traumatic and non-traumatic pain. Emergency care providers should disclose to patients that SDK administration may trigger generally minor, transient side effects. Administration of sub-dissociative ketamine should commence under the same procedures and policies as other analgesic agents administered by the nursing staff in the ED setting.
- Intravenous lidocaine may be beneficial for specific, acutely painful conditions (eg, renal colic, acute radicular back pain, herpetic/post-herpetic neuralgia) in patients without known structural heart disease or rhythm disturbances.
- Topical lidocaine patches may be used for certain pain syndromes, such as post-herpetic neuropathic pain and myofascial pain.
- Opioid analgesics are commonly used to manage acute severe pain in the ED as well as pain refractory to non-opioids. Before prescribing, assess risks of harm and counsel patients regarding serious adverse effects, such as sedation, respiratory depression, risk of tolerance and hyperalgesia, and potential risk of opioid use disorder. Risks of co-prescribing opioids with other CNS depressants, such as benzodiazepines, and the patient's individual risk of abuse should also be considered.
 - Patients can benefit from knowing opioid alternatives before receiving these agents, allowing shared analgesic planning.
 - In severe acute pain, titrate parenteral opioids in incremental doses based on response targeting comfort and function rather than complete pain relief.
 - As a general principle, those being prescribed opioids should only receive immediate-release opioids in the lowest effective dose for the shortest reasonably practical course.
 - Emergency care providers should generally not initiate therapy with extended-release (ER) (eg, OxyContin, Opana ER, fentanyl patch) or long-acting (LA) opioids (eg, methadone).
 - Patients presenting to the ED for acute exacerbation of chronic pain should generally not receive an opioid analgesic or opioid prescription. When feasible, coordinate treatment with the patient's primary pain management provider. Individualized treatment plans and contracts may be effectively used to guide treatment. If deemed necessary, the emergency care provider should only prescribe the minimal amount needed for a reasonable follow-up interval.
 - Prescription-monitoring programs allow emergency providers to identify and counsel patients with aberrant use patterns; this helps limit opioid abuse potential and identify those who may benefit from addiction treatment.²
 - Patients should also be counseled about safe medication storage and disposal.

Non-pharmacologic treatments:

- Given the adverse effects associated with many analgesics, it is particularly important to understand and employ non-pharmacologic treatments, including patient-centered communication techniques, physical interventions, ice/heat, topical coolant sprays, recommendations for activity and exercise, and relaxation techniques. Effective use of these modalities can improve care and lessen risk of harm from pharmacologic therapy.
- Empathic patient-centered communication is a core competency for emergency care providers. Patient-physician interactions characterized by empathy and trust are more likely to lead to optimal outcomes.³
- Mind-body therapies (MBT), alone or in combination with other modalities, have documented efficacy in the management of some types of pain; however, there is no evidence regarding their efficacy for ED patients.⁴⁻⁶
- There is a need for well-designed studies that examine the effect of behavioral therapy in the treatment of pain in ED patients.⁷

Appendix/Definitions:

Tolerance: "Tolerance is a state of adaptation in which exposure to a drug induces changes that result in a diminution of one or more of the drug's effects over time."⁸

Physical Dependence: Physical dependence is a state of adaptation that often includes tolerance and is manifested by a drug class specific withdrawal syndrome that can be produced by abrupt cessation, rapid dose reduction, decreasing blood level of the drug, and/or administration of an antagonist.⁸

Addiction: Addiction is a primary, chronic, neurobiological disease, with genetic, psychosocial, and environmental factors influencing its development and manifestations. It is characterized by behaviors that include one or more of the following: impaired control over drug use, compulsive use, continued use despite harm, and craving.⁸

"Opioid-induced hyperalgesia": "Opioid-induced hyperalgesia (OIH) is defined as a state of nociceptive sensitization caused by exposure to opioids. The condition is characterized by a paradoxical response whereby a patient receiving opioids for the treatment of pain could actually become more sensitive to certain painful stimuli."⁹ OIH is difficult to differentiate from tolerance and cannot be reliably diagnosed in the ED.

Pain Classification:

Acute: Pain related to acute injury, harm or repair, and often shorter duration (typically less than 30 days). The cause may be known or unknown. Acute pain usually occurs as part of a single and treatable event. It is often (not always) associated with autonomic nervous system responses (tachycardia, hypertension, diaphoresis). Acute pain typically decreases with time.

Examples of diagnoses that are associated with acute pain include the following: long bone fractures, appendicitis, burns, and procedural pain.

Acute exacerbation of a recurring painful condition: Pain can occur over any duration of time. Pain is due to chronic organic nonmalignant pathology. Examples of diagnoses that include acute exacerbation of a

recurring painful condition are the following: sickle cell pain episodes and migraine headache. There are pain free episodes between the exacerbations.

Chronic/persistent pain: Chronic (persistent) pain is pain that lasts longer than the expected time of healing. There is continuous pain or the pain recurs at intervals for months or years. In some cases, there are acute exacerbations of chronic pain problems. The cause is often unknown. Examples of chronic/persistent pain include the following: low back pain, diabetic neuropathy, post herpetic neuralgia, multiple sclerosis, and phantom pain.

Cancer pain: Pain caused by "conditions that are potentially life-threatening." The causes of cancer pain are cancer itself, treatment of cancer, and concurrent disease. Examples of cancer pain include the following: cancer of the pancreas, spinal cord compression caused by tumor infiltration, postsurgical pain associated with cancer treatment, and post mastectomy syndrome.

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