Principles of Emergency Department Pain Management for Patients with Acutely Painful Medical Conditions

Introduction
- Pain is the most common reason for people to seek health care, and as a presenting complaint, it accounts for more than two-thirds of visits to the emergency department [4,6,11].
- Most patients experience pain from nontraumatic causes.
- Major categories of acutely painful medical conditions include myofascial back or neck pain, abdominal pain, headache, chest pain, and pain secondary to upper-respiratory infections [12].
- While acute pain treatment has received more attention over the past decade, pain undertreatment is all too common in many settings [12].
- Pain management guidelines and protocols, when implemented consistently, predictably improve short-term pain outcomes [5].

Ethical Principles
- Ethical principles of beneficence (the duty to perform actions for the benefit of others) and non-maleficence (the duty to do no harm) provide a moral grounding for our approach to the person in pain.
- Out of respect for patient autonomy, choices among various analgesic interventions should incorporate the patient’s preferences, when feasible.
- The principles of distributive justice argue that resources should be allocated fairly and that inappropriate disparities in analgesic treatment based on gender, ethnicity, or socioeconomic status should be recognized and eliminated.

Assessment
- To achieve satisfactory treatment of pain, the clinician must first recognize and assess the pain. A variety of standard assessment tools are readily available to the clinician, and they should be used routinely.
- Specific patient subgroups—including infants and children, the cognitively impaired, and the elderly—are at increased risk for inadequate pain treatment. Specific tools, such as the FLACC and PAINAD, which measure specific pain-related behaviors, are required to assess pain in these populations [9,13].

Treatment Protocols
- Pain assessment and treatment protocols should be developed and instituted.
- Regulatory bodies that oversee practitioners and health care institutions require documentation of pain assessment in various clinical settings.
- Effective analgesic interventions and documentation of responses to these interventions will receive increased scrutiny.
- Protocols that include nurse-initiated analgesic interventions may result in more rapid relief of pain.

Specific Conditions
- Acute abdominal pain:
  - Historically, analgesics have been underutilized in the treatment of acute abdominal pain for fear of masking potentially serious diagnoses and causing delays in needed surgical interventions. This fear is unsubstantiated; a number of randomized, controlled trials support the safety of early analgesic administration in the setting of acute abdominal conditions.
  - Titrated analgesic doses of intravenous opioids do not mask important clinical findings, nor do they increase diagnostic error rates or delay appropriate surgical intervention [8].
- Acute low back pain [1,2,3]:
  - Myofascial acute low back pain is a very common, self-limiting presenting condition in the doctor’s office or emergency department.
Imaging studies should be deferred unless the history and physical examination suggest a more serious etiology, such as cancer, fracture, or cauda equina syndrome.

Initial analgesic requirements may be substantial, and treatment with nonsteroidal anti-inflammatory drugs (NSAIDs) or acetaminophen (also called paracetamol) should be initiated. Adequate control of pain may require short-term use of immediate-release opioids. Long-term opioid therapy should not be commenced unless recommended by consensus guidelines.

Initial aggressive analgesic treatment allows early mobilization and the avoidance of prolonged bed rest. Bed rest is a well-recognized risk factor for delayed resolution of pain and slower return to full function.

- Renal colic:
  - The excruciating pain of renal colic accounts for one million visits to U.S. emergency departments nationally, and the incidence of this condition is increasing.
  - The combination of intravenous NSAIDs and opioids is superior to the use of either modality alone, resulting in more rapid resolution of pain with less nausea and vomiting.
  - Patients presenting with typical symptoms should receive rapid analgesic therapy without delays in treatment for confirmatory testing with urinalysis or imaging studies [10].

- Migraine headache:
  - Opioids are rarely appropriate as first-line therapy for primary headache disorders.
  - Antiemetic dopamine antagonists, including prochlorperazine and metoclopramide, are the preferred agents for treatment of established migraine headaches in patients presenting to the emergency department [13].
  - Triptan therapy may be considered for the treatment of new-onset or infrequent migraine that does not respond to NSAIDs, but only after more serious causes of acute headache have been carefully excluded.

References