

## **Pain control in the ED: challenges and opportunities**

Annual Update in Emergency Medicine, February 2012, Whistler, B.C.

Paul D. Hannam, MD CCFP(EM)

### **Description:**

Acute pain is prevalent amongst patients presenting to the emergency department. Numerous studies have suggested that pain is frequently undertreated despite published guidelines. Expertise in pain control remains an opportunity for clinicians to provide better care for our patients even when a definitive treatment is not available.

### **Objectives:**

1. Recognize the prevalence of pain in the emergency department as well as the role of pain management in acute care.
2. Understand the barriers to pain treatment in the emergency setting and strategies to manage them.
3. Discuss evidence for approaches to pain management in specific populations.

### **Outline:**

Approximately 78% of patients in the emergency department have pain.

- Current evidence indicates that emergency departments perform poorly in controlling pain.
- Abuse/misuse of prescription medications results in significant morbidity and mortality

How do we tell who has “real” pain?

- Chronic pain patients are no more likely to abuse medications compared to the general population.
- Be aware of pseudo-addiction as a possible source of disruptive behavior (key point: resolves once pain is controlled).
- Know your biases.

Are pain scores useful?

- Reproducible in a study setting, but may not predict who actually requires treatment.
- Conflicting evidence regarding pain scoring and outcomes in an emergency department. Positive impact may be due to secondary factors as opposed to actual score.
- Frequent communication, e.g. “Do you need any more pain medicine?” may have more clinical utility than any other intervention.

Treating acute pain in the setting of abuse/misuse/chronic pain:

- We don't blame diabetics when we treat them

- Be aware of strengths and limitations of equi-analgesic dosing tables for breakthrough pain

How do I screen for potential abuse when prescribing?

- Factors consistently associated with high risk of abuse:
  - Family history or personal history of drug or alcohol abuse
  - Multiple drug use
  - Smoking
  - Needle use
  - Previous use of drug treatment facility
- Screening tools such as OPT (MD interview, quick to administer) or COMM (self completed survey of 17 questions, validated) will document risk of abuse but should not be used in isolation to deny medication.
- Consider prescribing a high risk individual an acceptable average dose (as oppose to reported dose) until next business day. Message to family physician and/or pharmacist also useful.
- A departmental policy may help to ensure clarity and consistency amongst providers. Useful reference: <http://nationalpaincentre.mcmaster.ca/>

Specific settings:

Adjunctive treatments to opioids:

- Low dose ketamine 0.3 mg/kg IV is sub-dissociative and reduces opioid requirements as well as vomiting in post operative and cancer patients
- Smaller studies in emergency setting

Sickle cell disease:

- Weak evidence for oxygen or IV hydration
- Fentanyl or dilaudid IV may be more appropriate choices than morphine
- In the acute setting treat pain first. The rates of addiction are no different to the general population. Frequent users are in fact sicker.

Acute pain in pediatrics:

- Good evidence for intranasal fentanyl 1.5 mcg/kg via atomiser
- Potential to decrease time to effective analgesia significantly

### **Speaker contact information:**

Paul Hannam MD CCFP(EM)  
 Lecturer, Department of Family and Community Medicine  
 University of Toronto  
 Chief, Department of Emergency Medicine  
 Toronto East General Hospital  
 Toronto, ON M4C 3E7  
[phann@tegh.on.ca](mailto:phann@tegh.on.ca)

## References:

### Pain is frequently undertreated in the ED:

Rupp T et al. Inadequate analgesia in emergency medicine. *Ann Emerg Med* 2004; 43: 494–503.

Todd K et al. Pain in the emergency department: results of the Pain and Emergency Medicine Initiative (PEMI) multicenter study. *J Pain* 2007; 8(6): 460-466.

Dhalla I et al. Opioid analgesic prescribing and mortality before and after the introduction of long-acting oxycodone in Ontario. *CMAJ* 2009; 181 (12).

### Chronic pain in the ED:

Chou R et al. Opioids for chronic noncancer pain: Prediction and identification of aberrant drug-related behaviours: A review of the evidence for an American Pain Society and American Academy of Pain Medicine Clinical Practice Guideline. *J Pain* 2009; 10(2): 131-146.

Fishbain D What percentage of chronic nonmalignant pain patients exposed to chronic opioid analgesic therapy develop abuse/addiction and/or aberrant drug-related behaviours? A structured evidence-based review. *Pain Med* 2008 9(4): 444-459.

LaCalle E et al. Frequent users of emergency departments: The myths, the data, and the policy implications. *Ann Emerg Med* 2010; 56(1): 42-48.

Neighbour M et al. Heightened pain perception in illicit substance-using patients in the ED: implications for management. *Am J Emerg Med* 2011; 29: 50-56.

Shaheen P et al. Opioid equianalgesic tables: Are they all equally dangerous? *J Pain Sympt Manag* 2009; 38(3):409-417

Wilsey B et al. A qualitative study of the barriers to chronic pain management in the ED. *Am J Emerg Med* 2008; 26: 255-263.

### Pain scoring:

Boyd R et al. The efficacy of structured assessment and analgesia provision in the pediatric emergency department *Emerg Med J* 2005; 22: 30-32.

Jadav M et al. Routine pain scoring does not improve analgesia for children in the emergency department. *Emerg Med J* 2009; 26(10): 695-697.

Jao K et al. Simple clinical targets associated with a high level of patient satisfaction with their pain management. *Emerg Med Australas* 2011; 23(2): 195-201.

Singer A et al. Triage pain scores and the desire for and use of analgesics. *Ann Emerg Med* 52(6): 689-695.

Vazirani J et al. Mandatory pain scoring at triage reduces time to analgesia. *Ann Emerg Med* 2012; 59(2): 134-138.

Weng Y et al. Triage pain scales cannot predict analgesia provision to pediatric patients with long-bone fracture. *Am J Emerg Med* 2010; 28: 412-417.

#### Low dose Ketamine:

Bell R et al. Perioperative ketamine for acute postoperative pain. *Cochrane Database Syst Rev* 2009;(1)

Lester L et al. Low-dose ketamine for analgesia in the ED: a retrospective case series. *Am J Emerg Med* 2010; 28: 820-827.

Messenger D et al. Subdissociative-dose ketamine versus fentanyl for analgesia during propofol procedural sedation: a randomized clinical trial. *2008; 15(10): 877-886.*

Oda, A et al. Patient anxiety scores after low-dose ketamine or fentanyl for epidural catheter placement. *Can J Anesth* 2000; 47(9): 910-913.

Schmidt,R et al. Use and efficacy of low-dose ketamine in the management of acute postoperative pain: a review of current techniques and outcomes. *Pain* 1999; 82:111-125.

Zempsky W et al. Use of low-dose ketamine infusion for pediatric patients with sickle cell disease-related pain: a case series. *Clin J Pain* 2010;26:163-167.

#### Intranasal Fentanyl:

Borland M et al. Intranasal fentanyl reduces acute pain in children in the emergency department: A safety and efficacy study. *Emerg Med* 2002; 14:275-280

Borland M et al. A randomized controlled trial comparing intranasal fentanyl to intravenous morphine for managing acute pain in children in the emergency department. *Ann Emerg Med* 2007 49(3): 335-340.

Cole J Intranasal fentanyl in 1-3 year-olds: a prospective study of the effectiveness of intranasal fentanyl as acute analgesia. *Emerg Med Australas* 2009; 21(5): 395-400.

Holdgate A The implementation of intranasal fentanyl for children in a mixed adult and pediatric emergency department reduces time to analgesic administration. *Acad Emerg Med* 2010; 17(2): 214-217.

Saunders M Use of intranasal fentanyl for the relief of pediatric orthopedic trauma pain. *Acad Emerg Med* 2010; 17(11): 1155-1161.

#### Sickle Cell:

Aisiku I et al. Comparisons of high versus low emergency department utilizers in sickle cell disease. *Ann Emerg Med* 2009; 53(5): 587-593.

Darbari D et al. Increased clearance of morphine in sickle cell disease: implications for pain management. *J Pain* 2011; 12(5):531-538.

Dunlop R et al. Pain management for sickle cell disease in children and adults. *Cochrane Data base Syst Rev* 2009;(1)

#### Screening for medication abuse in the ED:

Butler S et al. Cross-validation of a screener to predict opioid misuse in chronic pain patients (SOAPP-R) *J Add Med* 2009;3(2): 66-73.

Meltzer E et al. Identifying prescription opioid use disorder in primary care: Diagnostic characteristics of the Current Opioid Misuse Measure (COMM) *Pain* 2011; 115(2): 397-402.

Webster L et al. Predicting aberrant behaviors in opioid-treated patients: preliminary validation of the Opioid Risk Tool. *Pain Med* 2005; 6(6): 432-442.