OPIOIDS 2020: WHERE ARE WE AND WHAT ARE WE DOING...

Ryan A. Stanton MD, FACEP
Board of Directors- American College of Emergency Physicians
Central Emergency Physicians
Medical Director- Lexington Fire/EMS
AMR/NASCAR Safety Team
CONFLICTS...
IS THE OPIOID EPIDEMIC OVER...NO!!!

• But there is progress...

• Where are we now...
  • From 1999 to 2017, >700,000 people died from a drug overdose.
  • Around 68% of the more than 70,200 drug overdose deaths in 2017 involved an opioid. (>47k)
  • In 2017, the number of overdose deaths involving opioids was 6 times higher than in 1999.
  • On average, 130 Americans die every day from an opioid overdose.
IS THE OPIOID EPIDEMIC OVER...

• Opioid deaths in many states are starting to stabilize and even drop slightly.
  • Predictions that nationwide, numbers will stabilize and start to fall by 2022

Opioid-overdose death rate drops in Kentucky

Melissa Patrick
Kentucky Health News  Nov 9, 2018
BY THE NUMBERS…

THE OPIOID EPIDEMIC BY THE NUMBERS

130+
People died every day from opioid-related drug overdoses (estimated)

10.3 m
People misused prescription opioids in 2018

47,600
People died from overdosing on opioids

2.0 million
People had an opioid use disorder in 2018

808,000
People used heroin in 2018

81,000
People used heroin for the first time

2 million
People misused prescription opioids for the first time

15,349
Deaths attributed to overdosing on heroin (in 12-month period ending February 2019)

32,656
Deaths attributed to overdosing on synthetic opioids other than methadone (in 12-month period ending February 2019)

SOURCES
1. 2019 National Survey on Drug Use and Health. Mortality in the United States, 2018
2. NCHS Data Brief No. 325, November 2018
DON’T FORGET…

4.1 in 1999!!!
HOW DID WE GET HERE?...
PRODUCTION OF ADDICTION

Substance

Susceptibility
WHAT IS HAPPENING...

- Legislative...

**Senate passes sweep package**

The set of 70 bills is one of the only bipartisan legislation to be approved this year.
WHAT IS HAPPENING...

• Legislative...

OPIODS

Life-saving treatment bill advanced in state hit hard by opioid epidemic

FEBRUARY 18, 2019

Andis Robeznieks
Senior News Writer
American Medical Association
@mmednews

Full Bio

The AMA is working with the Kentucky Medical Association, the American Society of Addiction Medicine and the Kentucky Society of Addiction Medicine to pass state House Bill 12. The measure would prohibit commercial...
WHAT IS HAPPENING...

• Community...

‘We have no time to waste.’ Mayor Gorton pushes city-wide response to opioid crisis.

Community Paramedic Pilot in Lexington, Kentucky, Resulting in Fewer EMS Calls

Community-Based Prevention and Strategies for the Opioid Crisis

Howard K. Koh, MD, MPH1

The JAMA Forum
September 19, 2017

Views 12,349 | Citations 3 | Altmetric 22
• Healthcare...

March 6, 2018

**Effect of Opioid vs Nonopioid Medications on Pain-Related Function in Patients With Chronic Back Pain or Hip or Knee Osteoarthritis Pain**

The SPACE Randomized Clinical Trial

Eli E. Stolte, MD, MPH; Amy Zvosec, MD; Saeid Sayadi, MS; Scott J. Venticinque, MD; et al.

> Author Affiliations | Article Information


**Opioids no more effective than NSAIDs for chronic pain: 4 study findings**

Alia Paavola - Wednesday, March 7th, 2018 Print | Email

Nonsteroidal anti-inflammatory drugs, such as acetaminophen and ibuprofen, proved better at easing the intensity of chronic back, knee or hip pain than opioids, according to a study published in JAMA.
WHAT IS HAPPENING...

• Recovery...

OPTIONS FOR OPIOID DEPENDANCE RECOVERY

Outpatient Services  Residential Facilities  Inpatient Hospital Setting
WHAT IS HAPPENING...

We MUST take down barriers to success...
WHAT’S NEXT…

- Education
  - Healthcare
    - Addiction Facts, Truths, Realities
    - Pain Management
    - Addiction Prevention
    - EBM
  - Public
  - Patients
  - Policy Makers

- Action
  - Evolve Practice
  - Access to Recovery
  - Build Bridges...Tear Down Silos
  - Advocate for Change
  - Healthcare...Up Your Game!!!
  - Be Hope!
• We have the tools...
COLORADO ACEP OPIOID PRESCRIBING GUIDELINES

Emergency Medical Minute- Dr. Donald Stader
St. Joseph's Announces Innovative ALTO Program

St. Joseph's Healthcare System has officially announced ALTO®, Alternatives to Opiates Program, which opened the Legislative Summit hosted by St. Joseph's Regional Medical Center.

The first program of its kind in the United States, ALTO® is led by Dr. Mark Rosenberg, Chairman of Emergency Medicine and Medical Director for Population Health at St. Joseph’s Healthcare System and spearheaded by Alexis LaPietra, Medical Director of Pain Management in the Emergency Department at St. Joseph’s Regional Medical Center. The ingenuity of the thought-leaders to stem the use of opiates whenever possible in our Emergency Department, led National, State and Local Legislators and leaders in Behavioral Health, Law Enforcement and the healthcare industry to St. Joseph’s in praise of this program and our organization.
THE COMMONWEALTH OF KENTUCKY

Kentucky Hospitals Working Together to Fight the Opioid Epidemic
• GO WITH THE EVIDENCE!!
• Don’t become a victim to the “easy button”
  • Don’t paint every room the same color
• Many therapies are consistently superior to opioids in many common ED presenting complaints
• Every game needs a champion...be the champion
• Educate
• ALTO- Renal Colic, MSK Pain, Back Pain, Headache/Migraine, Extremity Fxr/Dl
RENAL COLIC

KIDNEY STONES

CAUSE OF KIDNEY STONES

- Not drinking enough fluids
- Genetic
- Overweight
- Medication
- Foods

SYMPTOMS

TREATMENTS

- Medicine
- Ultrasound shock waves
- See a doctor

INFOGRAPHICS

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.
RENAL COLIC

• Ketorolac 15 mg IV x 1
• Cardiac Lidocaine 1.5 mg/kg IV (MAX 200 mg) infused over 10 minutes via smart pump 3.
• Acetaminophen 1000 mg PO or IV
• 1 L NS bolus if indicated as per physician
Nonsteroidal anti-inflammatory drugs (NSAIDS) versus opioids for acute renal colic

Anna Holdgate, Tamara Pollock

First published: 26 January 2004

Editorial Group: Cochrane Kidney and Transplant Group

DOI: 10.1002/14651858.CD004137.pub3 View/save citation

Cited by: 0 articles Citation tools

Effectiveness of intravenous lidocaine versus intravenous morphine for patients with renal colic in the emergency department

Hassan Soleimanpour, Kamaleddin Hassanzadeh, Hassan Vaezi, Samad EJ Golzari, Robab Mehdizadeh Esfanjani and Maryam Soleimanpour


Received: 10 December 2011 | Accepted: 4 May 2012 | Published: 4 May 2012

Therapeutic Approaches for Renal Colic in the Emergency Department: A Review Article

Samad EJ Golzari, Hassan Soleimanpour, [...], and Hanieh Ebrahimi Bakhtavar

A Systematic Review and Meta-analysis Comparing the Efficacy of Nonsteroidal Anti-inflammatory Drugs, Opioids, and Paracetamol in the Treatment of Acute Renal Colic

Sameer A. Pathan a, b, c, d, Biswadev Mitra b, c, d, Peter A. Cameron b, c, d
BACK PAIN...
BACK PAIN- ACUTE OR CHRONIC

• Acetaminophen 1000 mg PO
• Ibuprofen 400 mg PO OR Ketorolac 15 mg IV/IM
• Flector patch 1.3% apply to affected area if cannot tolerate PO/IV NSAIDs
• Muscle Relaxant
• Gabapentin (neuropathic component of pain) a. 150 mg PO (frail or elderly pts with fall risk) b. 300 mg PO
• Lidoderm patch to most painful area, MAX 3 patches instruct patient to remove after 12 hours a. For discharge prescribe Lidocaine 5% cream or ointment, apply TID or recommend OTC 4% patches
• Trigger Point Injection with Bupivacaine 0.5% or Lidocaine 1% 1-2 mL
• Ketamine 0.3 mg/kg IV infusion over 10 minutes (ketamine 100 mg/100 mL NS)
Use of the lidocaine patch 5% in reducing intensity of various pain qualities reported by patients with low-back pain

Bradley S. Galer, Arnold R. Gammaitoni, Napoleon Oleka, Mark P. Jensen & Charles E. Argoff

Pages S5-S12 | Accepted 04 Oct 2004, Published online: 12 Nov 2004

Download citation http://dx.doi.org/10.1185/030079904X12933
MIGRAINE HEADACHE...
MIGRAINE HEADACHES

- Metoclopramide 10 mg PO/IV
- 1 L 0.9% NS/LR bolus
- Ibuprofen 400 mg PO Or Ketorolac 15 mg IM/IV
- Acetaminophen 1000 mg PO
- Cervical or Trapezius Trigger Point Injection with 1-2 mL Bupivacaine 0.5% or Lidocaine 1%
- Steroids?
- Valproate?
- Magnesium?
Parenteral dexamethasone for acute severe migraine headache: meta-analysis of randomised controlled trials for preventing recurrence.

Colman I, Friedman BW, Brown MD, Innes GD, Grafstein E, Roberts TE, Rowe BH.

Abstract

OBJECTIVE: To examine the effectiveness of parenteral corticosteroids for the relief of acute severe migraine headache and prevention of recurrent headaches.

DESIGN: Meta-analysis.
Does the Addition of Dexamethasone to Standard Therapy for Acute Migraine Headache Decrease the Incidence of Recurrent Headache for Patients Treated in the Emergency Department? A Meta-analysis and Systematic Review of the Literature

Amandeep Singh MD, Harrison J. Alter MS, MD, Brita Zaia MD

First published: 27 October 2008  Full publication history
DOI: 10.1111/j.1553-2712.2008.00283.x  View/save citation
Cited by: 20 articles  Citation tools
Intravenous Valproate versus Subcutaneous Sumatriptan in Acute Migraine Attack

Fahmida Ghaderibarmi¹, Nader Tavakkoli¹, and Mansoureh Togha²

¹ Department of Emergency, School of Medicine, Iran University of Medical Sciences, Tehran, Iran
² Department of Neurology, School of Medicine, Tehran University of Medical Sciences, Tehran, Iran

Received: 05 Jul. 2014; Accepted: 25 Dec. 2014

Valproate (valproic acid or sodium valproate or a combination of the two) for the prophylaxis of episodic migraine in adults.

Linde M, Mulleners WM, Chronicle EP, McCrory DC.
Evaluation of efficacy of intra-nasal lidocaine for headache relief in patients refer to emergency department

Naser Mohammadkarimi, Mohammadali Jafari, [...], and Amir Shirali


<table>
<thead>
<tr>
<th>Class</th>
<th>Medication</th>
<th>Typical Dose and Route</th>
<th>Estimation of Efficacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dopamine receptor antagonists</td>
<td>Chlorpromazine</td>
<td>0.1 mg/kg to 25 mg IV or IM</td>
<td>83% effective at 1 hour in a small, randomized, double-blind placebo-controlled trial.</td>
</tr>
<tr>
<td></td>
<td>Prochlorperazine</td>
<td>10 mg IV or IM; 25 mg PR</td>
<td>IV/IM route effective in 67% to 88% at 30 min to 60 min, randomized, double-blind, placebo-controlled trials.</td>
</tr>
<tr>
<td></td>
<td>Promethazine</td>
<td>25 mg IM (caution with IV NA administration)</td>
<td>PP route had a positive outcome in all patients at 2 hours in a small, randomized, double-blind, placebo-controlled trial.</td>
</tr>
<tr>
<td></td>
<td>Metoclopramide</td>
<td>10 mg IV</td>
<td>Effective in 34% to 40% at 30 min to 60 min in small, prospective, randomized, double-blind, placebo-controlled trials.</td>
</tr>
<tr>
<td>Serotonin (5-HT1B/1D) receptor agonists</td>
<td>Sumatriptan</td>
<td>6 mg SC</td>
<td>Effective in 75% at discharge in a randomized, placebo-controlled, double-blind trial.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 or 20 mg intranasal</td>
<td>Mean pain score of the study group decreased significantly at 60 minutes in a small, prospective, randomized double-blind trial.</td>
</tr>
<tr>
<td>Ergot derivatives</td>
<td>Dihydroergotamine</td>
<td>0.5 to 1 mg IM or IV</td>
<td>60% reduction in mean pain rating at 1 hour in a small double-blind, placebo-controlled study using 0.75 mg IV DHE.</td>
</tr>
<tr>
<td>NSAIDs</td>
<td>Ketorolac</td>
<td>30 mg IM or IV</td>
<td>Approximately 80% decrease in mean pain rating at 2 hours using 60 mg ketorolac IM in a small randomized, double-blind trial.</td>
</tr>
<tr>
<td></td>
<td>Diclofenac</td>
<td>75 mg IM</td>
<td>Significant decrease in median pain score for the group (by approximately 57%) at 1 hour using 30 mg IV ketorolac in a small, randomized, double-blind trial.</td>
</tr>
<tr>
<td>Antiepileptics</td>
<td>Sodium valproate</td>
<td>300-1200 mg IV</td>
<td>80% effective at 2 hours in a small, randomized, double-blind study.</td>
</tr>
</tbody>
</table>

Note: DHE (Dihydroergotamine) is not listed in the table above but was mentioned in the reference text.
Ketorolac versus Magnesium Sulfate in Migraine Headache Pain Management: a Preliminary Study

Hossein Delavar Kasmaei¹, Marzieh Amiri²*, Ahmed Negida³, Samaneh Hajimollarabi⁴, Nastaransadat Mahdavi⁵

1. Department of Neurology, Shohadaye Tajrish Hospital, Shahid Beheshti University of Medical Sciences, Tehran, Iran.
2. Department of Emergency Medicine, Shahid Beheshti Hospital, Guilan University of Medical Sciences, Anzali, Iran.
3. Faculty of Medicine, Zagazig University, Zagazig, Egypt.
4. Faculty of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran.
5. Department of Anesthesiology, Jorjeh Hospital, Shahid Beheshti University of Medical Sciences, Tehran, Iran.

Received: November 2015. Accepted: January 2016. Published online: 8 January 2017
NEUROPATHIC PAIN

- NSAIDs
- Anti-Depressants
- Calcium Channel Ligands
- Topicals
- Physical Therapy
Pharmacologic management of neuropathic pain: Evidence-based recommendations


Opioids such as morphine, codeine and Tylenol 3 can be effective for treating pain, however, a new University of Alberta study finds that patients with neuropathic pain taking opioids report no improvements in physical functioning compared to those who were not prescribed opioids.
MVC...
FRACTURES AND DISLOCATIONS...
FRACTURES AND DISLOCATIONS

- Ketamine Intranasal 0.5 mg/kg (concentration 50 mg/mL)
- Acetaminophen 1000 mg PO
- Ketorolac 15 mg IV x 1
- Hematoma/Intra-Articular Injections
- Ultrasound Guided Regional Anesthesia
  - Femoral- Hip/Femur Fxrs
  - Median/Radial/Ulnar
  - Serratus/Intercostal- Ribs/Shingles
Ultrasound-guided femoral nerve blocks in elderly patients with hip fractures

Francesca L. Beaudoin MD, MS\textsuperscript{a,*}, Arun Nagdev MD\textsuperscript{a}, Roland C. Merchant MD, MPH, ScD\textsuperscript{a,b}, Bruce M. Becker MD, MPH\textsuperscript{a,b}

\textsuperscript{a}Department of Emergency Medicine, Rhode Island Hospital, Warren Alpert Medical School of Brown University, Providence, RI 02903, USA
\textsuperscript{b}Department of Community Health, Warren Alpert Medical School of Brown University, Providence, RI 02903, USA

Received 16 June 2008; revised 30 August 2008; accepted 3 September 2008

A prospective comparison of procedural sedation and ultrasound-guided interscalene nerve block for shoulder reduction in the emergency department.

Blaivas M¹, Adhikari S, Lander L.

Author information
1 Department of Emergency Medicine, Northside Hospital-Forsyth, Cuming, GA, USA. mike@blaivas.org
GENERAL PAIN...
The use of inhaled nitrous oxide for analgesia in adult ED patients: a pilot study.

Joseph Herres, DO
Carl R. Chudnofsky, MD, Rashmi Manur, MD, Kathia Damiron, MD, Kenneth Deitch, DO

Published Online: October 23, 2015

DOI: http://dx.doi.org/10.1016/j.ajem.2015.10.038

Development of an opioid reduction protocol in an emergency department


American Journal of Health-System Pharmacy December 2015, 72 (23) 2080-2086; DOI: https://doi.org/10.2146/ajhp140903
NSAIDs are stronger pain medications than opioids

A Summary of Evidence

Several Cochrane Reviews have looked at the effectiveness of pain relievers. Interestingly, the combination of 200 mg of ibuprofen and 500 mg of acetaminophen is one of the strongest pain reliever combinations available. It is clearly more efficacious than any of the opioids used alone or in combination with acetaminophen.

A recent review in the Journal of the American Dental Association also came to the conclusion that ibuprofen and acetaminophen combination is the best treatment of dental pain. (Moore, 2013)

Below is a summary of Cochrane reviews that have looked at different medications for the treatment of pain:

- **Naproxen for postop pain, 2011**: For naproxen the number needed for treatment (NNT) for at least 50% pain relief over four to six hours was 2.7 (95% CI 2.3 to 3.2). (C Derry & Derry, 2009)
- **Oxycodone for postop pain, 2010**: This updated review includes 20 studies, with 2641 participants. For oxycodone 15 mg there is an NNT for at least 50% pain relief was 4.6 (95% Confidence Interval 2.9 to 11). For oxycodone 10 mg plus paracetamol 650 mg, the NNT was 2.7 (2.4 to 3.1). (Gaskell, Derry, Moore, & McQuay, 2009)
- **Ibuprofen plus acetaminophen for post-op pain**: For ibuprofen 200 mg plus acetaminophen 500 mg there is an NNT of 1.6 (1.3 to 1.8). (C Derry, Derry, & Moore, 2013)
- **Treatment of renal colic, 2009**: Twenty trials from nine countries with a total of 1611 participants were identified. The studies showed that NSAIDs provided pain relief equal to opioids but with less side effects. The authors concluded that “Both NSAIDs and opioids can provide effective analgesia in acute renal colic. Opioids are associated with a higher incidence of adverse events, particularly vomiting.” (Hodgson & Rollock, 2004)

![Percentage of people with 50% pain relief (above placebo)](http://www.nsc.org/RxDrugOverdoseDocuments/evidence-summary-NSAIDs-are-stronger-pain-medications-than-opioids-with-IFP.pdf)
ISRN Emergency Medicine
Volume 2013 (2013), Article ID 583132, 19 pages
http://dx.doi.org/10.1155/2013/583132

Review Article
Management of Pain in the Emergency Department

Stephen H. Thomas

Kaiser Foundation, University of Oklahoma, Department of Emergency Medicine, 4501 East, 41st Street, Suite 2E14, Tulsa, OK 74135, USA

Received 3 April 2013; Accepted 23 April 2013

Academic Editors: O. Karcioğlu, L. M. Lewis, and R. Pitetti

PUTTING ALTO INTO PRACTICE

Alternatives to Opioids (ALTO®)
Alexis M. LaPietra, DO, FACEP
Acute Pain Protocols

PUTTING ALTO INTO PRACTICE

How to Implement Ultrasound-Guided Nerve Blocks in Your ED

By Arun Nagdev, MD; Graham Brant-Zawadzki, MD; and Andrew Herring, MD | on July 18, 2018 | 0 Comment

PUTTING ALTO INTO PRACTICE

MAP
MANAGING ACUTE PAIN IN THE ED

FOREARM NERVE BLOCK
INTRA-ARTICULAR POSTERIOR SHOULDER INJECTION
KETAMINE, ACUTE PAIN
KETAMINE, CHRONIC NON-CANCER PAIN

NITROUS OXIDE
POSTERIOR TIBIAL NERVE BLOCK
SPHENopalatine ganglion Block
TRIGGER POINT INJECTION

https://www.acep.org/patient-care/map/
RENAL COLIC

- Ketorolac 15 mg IV x 1
- Cardiac Lidocaine 1.5 mg/kg IV (MAX 200 mg) infused over 10 minutes via smart pump 3.
- Acetaminophen 1000 mg PO or IV
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• Gabapentin (neuropathic component of pain) a. 150 mg PO (frail or elderly pts with fall risk) b. 300 mg PO
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- Metoclopramide 10 mg PO/IV
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- Ibuprofen 400 mg PO Or Ketorolac 15 mg IM/IV
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- Steroids?
- Valproate?
- Magnesium?
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• Ketamine Intranasal 0.5 mg/kg (concentration 50 mg/mL)
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• Hematoma/Intra-Articular Injections
• Ultrasound Guided Regional Anesthesia
  • Femoral- Hip/Femur Fxs
  • Median/Radial/Ulnar
  • Serratus/Intercostal- Ribs/Shingles
Meds with Promise

- NSAIDs
- Tylenol
- Lidocaine
  - 3-way
- Ketamine
- Sound Waves (U/S)
  - Nerve Blocks
- Topicals
- Gabapentin
- DDAVP
- Needles
- Steroids
- Valproate
- Antispasmodics
- Haldol
RECOMMENDATIONS

• Do your homework
  • Know the Evidence
• Be a Champion
• Target Low Hanging Fruit
• Educate
• Institute Change
• Expand/Grow
• Be a disciple- Spread the Good Word
• Remember...there is NO easy button!!!

WHAT'S NEXT...
ALTO PROTOCOL REFERENCES


7. Ferrini R, Paice JA. How to initiate and monitor infusional lidocaine for severe and/or neuropathic pain. J Support Oncol. 2004 Jan-Feb;2(1):90-4


