

Analgesics in the ED: What works and what doesn't.

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Our current approach to IV analgesics is not ideal

Both Morphine and hydromorphone underperform when given as a single dose

1. Bijur PE, Kenny MK, Gallagher EJ. Intravenous morphine at 0.1 mg/kg is not effective for controlling severe acute pain in the majority of patients. Ann Emerg Med. 2005 Oct;46(4):362-7. PubMed PMID: 16187470.

We need IV protocols

Various protocols for re-dosing of IV analgesics exist. Most of these are logistically challenging.

2. Lvovschi V, Aubrun F, Bonnet P, Bouchara A, Bendahou M, Humbert B, Hausfater P, Riou B. Intravenous morphine titration to treat severe pain in the ED. Am J Emerg Med. 2008 Jul;26(6):676-82. doi: 10.1016/j.ajem.2007.10.025. PubMed PMID: 18606320.

A simple protocol asking the patient if they need more pain meds q30 provides adequate analgesia in 99% of cases

3. Chang AK, Bijur PE, Holden L, Gallagher EJ. Efficacy of an Acute Pain Titration Protocol Driven by Patient Response to a Simple Query: Do You Want More Pain Medication? Ann Emerg Med. 2016 May;67(5):565-72. doi: 10.1016/j.annemergmed.2015.04.035. Epub 2015 Jun 11. PubMed PMID: 26074387.

Oral OTC combinations outperform most other analgesics

Combinations of acetaminophen and ibuprofen at varying doses provide superior pain relief to most commonly prescribed oral analgesics

4. Moore RA, Derry S, Aldington D, Wiffen PJ. Single dose oral analgesics for acute postoperative pain in adults - an overview of Cochrane reviews. Cochrane Database Syst Rev. 2015 Sep 28;(9):CD008659. doi: 10.1002/14651858.CD008659.pub3. Review. PubMed PMID: 26414123.

5. Moore RA, Wiffen PJ, Derry S, Maguire T, Roy YM, Tyrrell L. Non-prescription (OTC) oral analgesics for acute pain - an overview of Cochrane reviews. *Cochrane Database Syst Rev*. 2015 Nov 4;(11):CD010794. doi: 10.1002/14651858.CD010794.pub2. Review. PubMed PMID: 26544675.

Topical NSAIDs

Topical NSAIDS combine the analgesic properties of oral NSAIDs with the placebo effect from the use of a lotion. Patients experience moderate rates of skin irritation but have essentially no GI or systemic adverse effects.

6. Tugwell PS, Wells GA, Shainhouse JZ. Equivalence study of a topical diclofenac solution (pennsaid) compared with oral diclofenac in symptomatic treatment of osteoarthritis of the knee: a randomized controlled trial. *J Rheumatol*. 2004 Oct;31(10):2002-12. PubMed PMID: 15468367.

7. Klinge SA, Sawyer GA. Effectiveness and safety of topical versus oral nonsteroidal anti-inflammatory drugs: a comprehensive review. *Phys Sportsmed*. 2013 May;41(2):64-74. doi: 10.3810/psm.2013.05.2016. Review. PubMed PMID: 23703519.