

Session 1: Medical Indications and Opioid Prescribing Guidelines for Acute Management

National Academies of Sciences
Applying Clinical Practice Guidelines to
Prescribing Opioids for Acute Pain: A Workshop

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Definition

- What is definition of **ACUTE** pain?
 - New, incident onset of pain
 - Pain associated with *emergent* conditions
 - Duration of pain (<3 or <6 months)
 - Severity
 - Resolves with healing of underlying cause
- ...contraindications for using opioids in emergency setting for acute pain?

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(allergies, hypotension or respiratory depression)

Pain in the Emergency Department

- Most common presenting symptom in the ED (60% of ED patients)
- Patient GOAL:
 1. Pain relief
 2. Fix cause of pain
- Clinician GOAL:
 1. Diagnosis
 2. Treatment

Considerations in Older Adults

- Age-related decrease in opioid requirements:
 - Decreased opioid metabolism (hepatic and body fat).
 - Decreased opioid renal clearance.
 - Changes in GI absorption (concurrent proton pump inhibitor use, etc.).
 - Polypharmacy (drug-drug interactions, OTC use).

Guerriero, World J Clin Cases, 2017

Administering Opioids in Older Adults

- Rule in older patients:

***Start low, go slow, longer dosing intervals
(reassess and titrate)***

- Short-acting, no sustained-release, short course

- Side Effects

- ***Nausea***
- ****Constipation*** (40% experience)
- ***Sedation***
- ****Delirium***
- ***Dizziness***
- ****Falls (hip fracture)***
- ***Immunosuppression***
- ****Overdose (insufficient care-giver support)***

Abdulla, Age Aging 2013

Older Adults: Substance Misuse & Addiction

- Greater risk of physical dependence.
- Tolerance and withdrawal less common.
- Addiction:
 - Lower risk than younger patients
 - Aging baby boomers: signal of increasing misuse of opioid prescriptions
 - Depression & social isolation (lack of support, loneliness)
 - Alcohol and polypharmacy
 - Less diagnosed in women >50 (disproportionate geriatric population), but increasing prevalence (11%)

Maree, Am J Geriatr Psychiatry 2016
Koechl, Gerontology, 2013
Culberson, Geriatrics 2008

Dental & Traumatic injuries

- Dental caries, tooth abscesses
- Falls, Fractures, Tears
 - Hip Fracture, high prevalence in older adults risk increases with age older adults (rise per decade)
 - 80's: 1 in 5 women with hip fracture
 - 90's: 1 in 2 with hip fracture
 - Rates were declining in early 2000, but since 2013, now climbing
Lewiecki, Osteoporos Int, 2018
 - Femoral or fascia iliaca better outcomes than opioids
Morrison, J Am Geriatr Soc 2016

Cardiac Chest Pain

- IV morphine provided better /quicker analgesia than metoprolol for AMI.

Everts, Eur J Pain 1999

- For non-ST segment elevation MI, morphine alone or in combo with nitroglycerine had increased mortality.

Meine, Am Heart J 2005

Abdominal pain

- Renal Colic – NSAID first line, opioid as combination.
Choiniere, J Trauma 1989
Dauber, Pain Med 2002
- Biliary Colic – opioids for severe pain (sphincter of Oddi tone and biliary spasm) but “no evidence to support this position of theoretical risk of smooth muscle spasm.”
Thompson, Am J Gastroenterol 2001
Dauber, Pain Med 2002
- Pancreatitis

Sickle Cell Disease

- IV opioid loading improves efficacy of subsequent oral and patient controlled analgesia.

Rees, Br J Haematol 2003

- Continuous infusion opioid, shorter duration of severe pain than intermittent

Robieux, Pediatr Hematol Oncol 1992

- PCA morphine reduced opioid dose and side effects

Van Beers, Am J Hematol 2007

- Oxygen and IV fluids do not decrease pain

Robieux, Pediatr Hematol Oncol 1992
Okomo & Meremikwu, Cochrane 2007

Burns and Shingles

➤ Effective pain management after acute burn essential:

- Pain relief
- Facilitate dressing changes
- Minimize chronic pain (35-58% burn patients)

Choiniere, J Trauma 1989
Dauber, Pain Med 2002

➤ Herpes zoster (shingles) – topical aspirin, topical lidocaine patches, then multimodal acetaminophen and opioid, or tramadol.

Dworkin, Clin infect Dis 2007
Cunningham, Med J Aust 2008
Dwyer, Cunningham, Med J Aust 2002

Conditions NO evidence for opioids

- Sciatica: BMJ review found efficacy and tolerability of drugs for sciatica unclear when comparing active drug treatment over placebo for sciatica.

Pinto et.al. BMJ 2012

- Headaches: most can be treated with NSAIDs, Acetaminophen, triptans, and ergots. Opioids of limited benefit in migraines and no more effective than placebo.

Nicolodi, Cephalalgia 1996

- Lower back pain: non-specific etiology in 95%, opioids risks outweigh benefit. Behavioral and non-pharmacological, multimodal therapies recommended.

Australian Acute Musculoskeletal Pain Guidelines Group, 2003

Thank you for your attention!

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