

Unraveling Post-Operative Pain Management

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Conflict of Interest

- No financial conflicts to disclose
- President-elect of the American Society for Pain Management Nursing
 - Non-profit
 - RNs & APRNs
 - Position statements
 - Road shows
 - 2021 Conference in San Antonio
 - Pain Management Nursing Journal
 - Member ListServe
 - www.ASPMN.org

Objectives

Summarize principles of acute pain management during the postoperative period

Describe the considerations for caring for patients with congenital colorectal conditions in the hospital pre- and post-surgery

List 2-3 words that come to mind when you think about providing pain management for this population of patients.

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A Tale of Two Patients

McKenzie

- 2y female adopted from China found to have perineal fistula and absent vagina
- She is now s/p primary PSARP and vaginal replacement with laparotomy

Leah

- 22 yo female born with long, common channel cloaca
- First repair at birth
- Second repair at age 5
- Presents with small bowel obstruction secondary to adhesions
- She is s/p exploratory laparotomy

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Who will have more difficult to control post-operative pain?

Leah

McKenzie

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Why do you think that is?



Understanding Pain

Basic Pain Physiology

1. Transduction
2. Transmission
3. Perception
4. Modulation

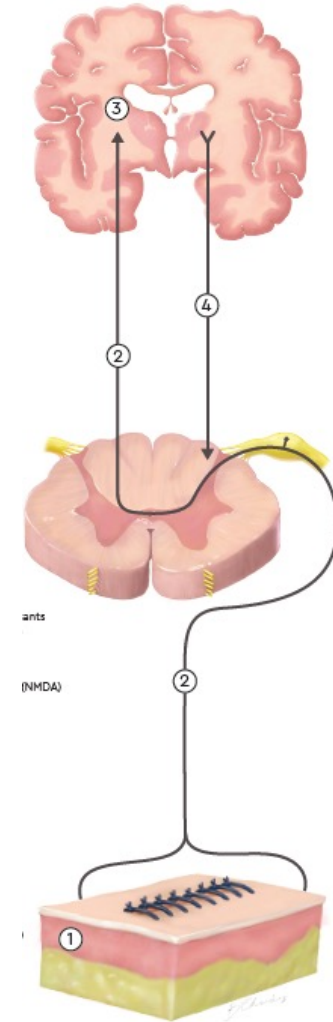


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When pain is not controlled

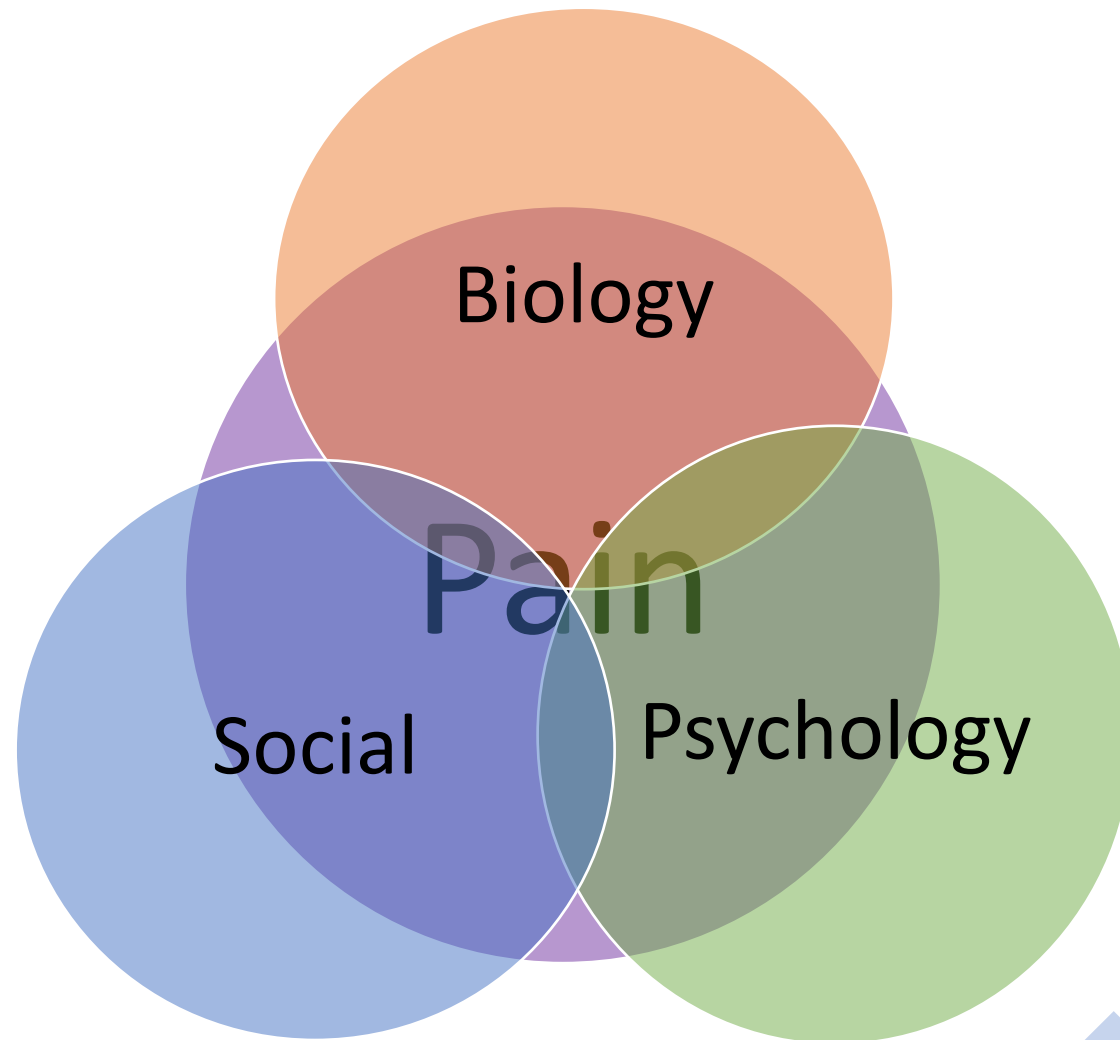
Peripheral sensitization (Windup)

- Recruitment of neighboring unstimulated pain fibers and non-pain fibers

Central sensitization

- Changes in central processing of pain
- Increased production of pain propagators (NMDA, Substance P)

Biopsychosocial Model?




What this means to your patients

No previous exposure to pain/pain well controlled in past

- No windup
- Expect “normal” response to pain and pain medications
- Treatment includes multi-modal pain management plan

Chronic pain or poorly controlled pain in the past

- Peripheral and central sensitization present
- Expect magnified pain response
- Treatment includes escalated multi-modal pain management plan



Creating a Pain Management Plan

Multimodal analgesia

Non-pharmacologic

Non-opioids

Topical and Regional analgesia

Opioids

Before Surgery

Pre-operative preparation

- What to expect
- What patient/family can do to help

Pain prevention

- Needle pain
- Preemptive analgesia

Pre-op preparation

Set Expectations

- Tour of surgical suite
- Discuss pain in realistic but not scary terms
- Discuss pain management plan
- Child Life

What patient/family can do to help pain

- Familiar objects
- Breathing techniques
- Light touch massage
- Distraction

At my facility needle pain mitigation is

Not important at all

Somewhat important

Very important

A priority

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At my facility needle pain is

Not controlled

Sometimes controlled

Almost always controlled

Always controlled

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Why worry about needle pain?

- Needle phobia is real
- Short-term outcomes
 - Fear
 - Trust
 - Cooperation
 - Physiologic
- Long-term outcomes of uncontrolled pain
 - Neonates
 - Circumcision
 - Vaccine hesitancy



Needle Pain

Comfort holds (handout)

Topical analgesics

- Eutectic mixture 2.5% lidocaine+2.5% prilocaine cream
- 4% lidocaine cream
- Needleless injection device with buffered lidocaine 1% (J-Tip)

Distraction

- Music
- Toys
- Video games
- Virtual reality

Pre-emptive analgesia

Pre-op

- Gabapentin/pregabalin
- Methadone

Intra-op

- Local anesthetic prior to first cut
- Block prior to first cut
- Ketamine
- Lidocaine infusion

Post-operative plan

Around the clock vs PRN

Regional blocks

Non-opioids

Opioids

Other adjuvants

WAIT! What non-pharmacologic interventions can we use?

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Before and with medication...



Why non-pharm?

Patient is center of control

Find out what non-pharm modalities they have used

Find something that works for that individual

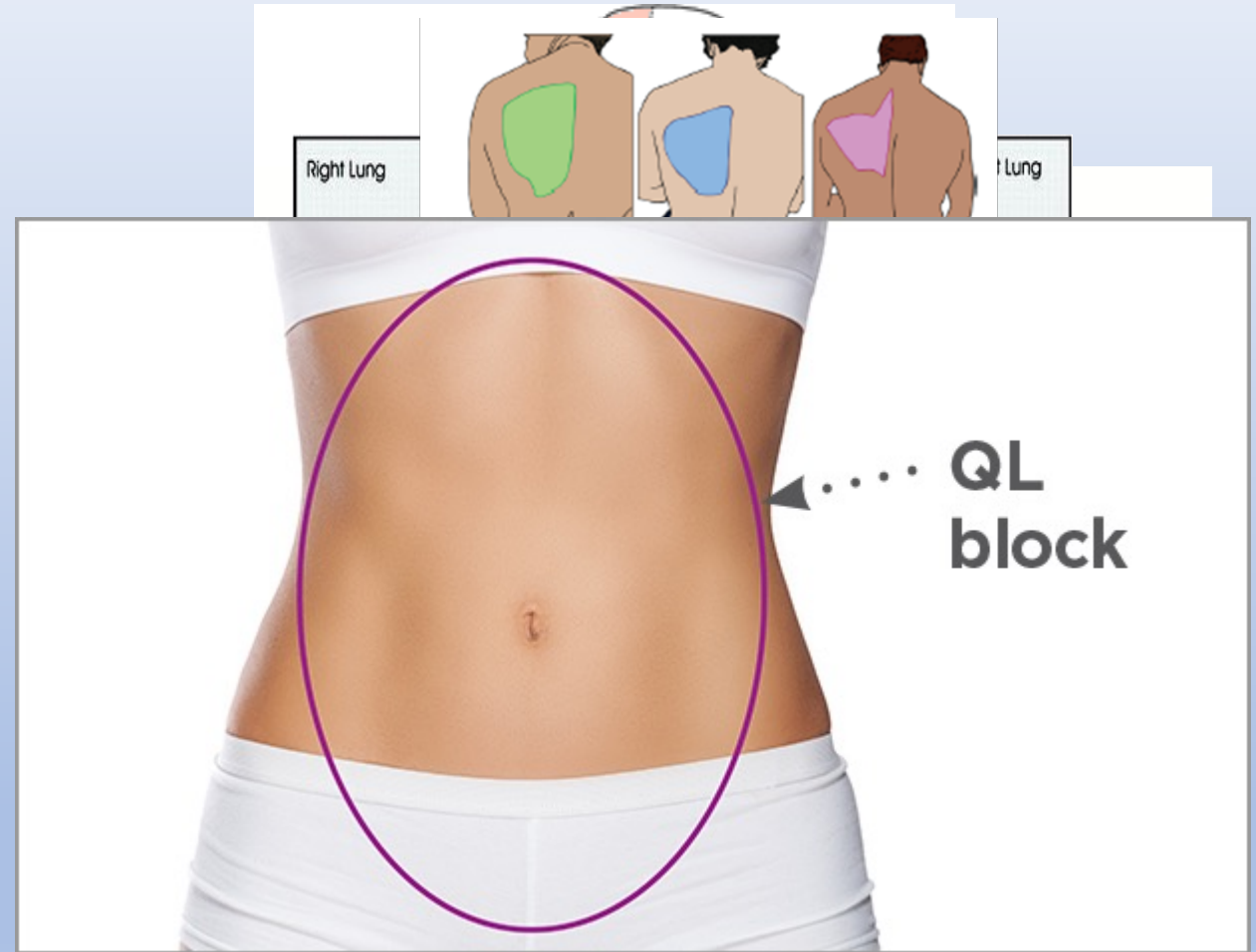
There's an app for that!

ATC vs PRN



Regional catheters

- Epidural
 - Myths
- Paravertebral
- Erector spinae
- Quadratus Lumborum



Non-opioids

NSAIDS

- Ketorolac
- Ibuprofen
- Naproxen
- Celecoxib

Acetaminophen

- IV vs PO

Opioids

Morphine

Hydromorphone

Fentanyl

Oxycodone

Hydrocodone

~~Codaine~~

Methadone

Choosing how to deliver an opioid

Intermittent IV vs PCA

- Intermittent
 - Dependent on nurse
 - No steady state
- PCA
 - Patient controls delivery
 - Basal vs no basal rate

IV vs PO

- IV is quicker
- PO slower but lasts longer

Other adjuvants

Anti-epileptic drugs (AED)

- Gabapentin
- Pregabalin

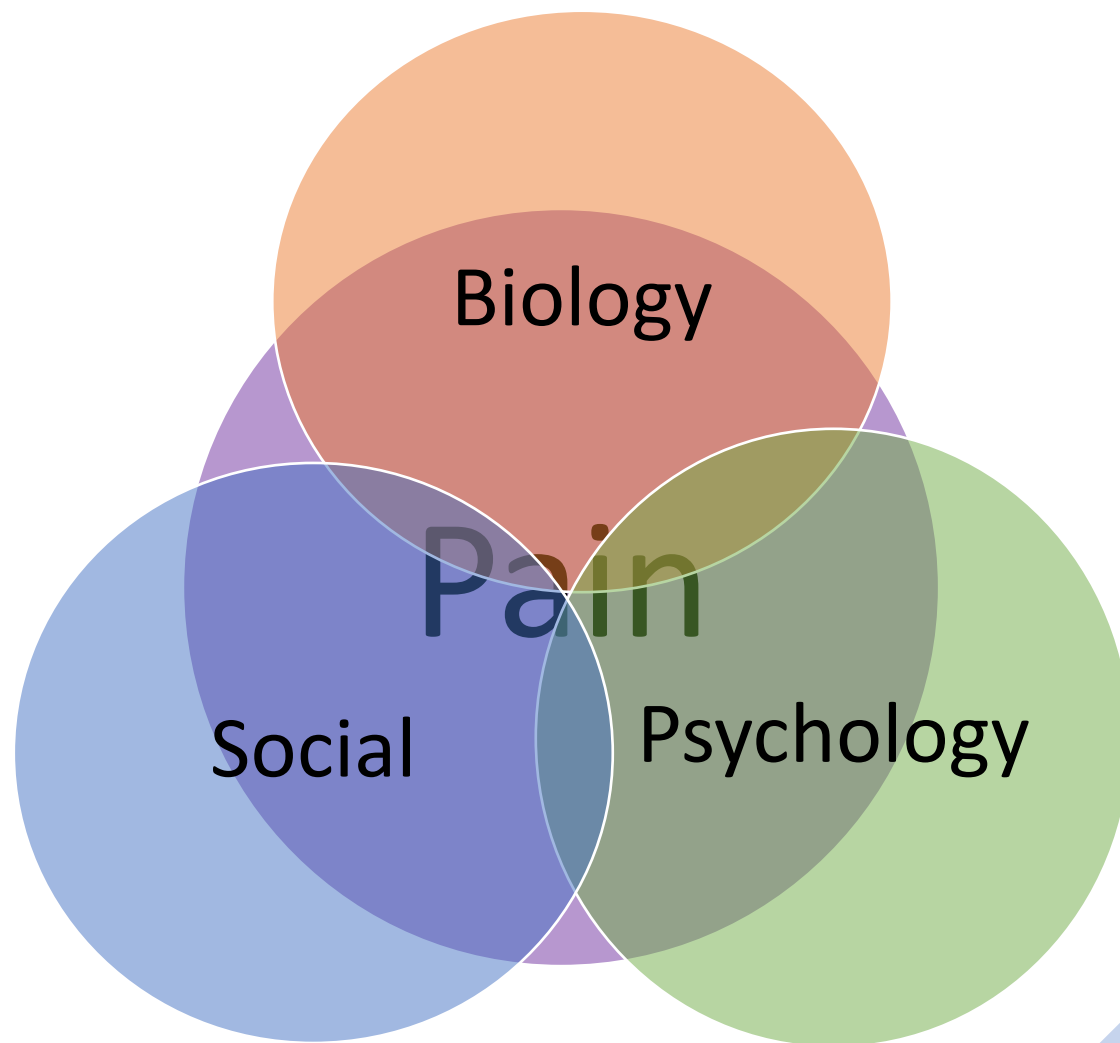
Alpha-2

- Clonidine
- Tizanidine
- Dexmedetomidine

Benzodiazepines

- Diazepam
- Baclofen

Why isn't it working?



To improve pain management in my patients I will

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Thank you



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Video Links

- [UC San Francisco Reducing Immunization Distress](#)
- [Buzzy for injections](#)
- [Why Things Hurt- Lorimer Moseley Ted Talk](#)
- [Be Sweet to Babies](#)
- [The Mystery of Chronic Pain- Elliot Krane Ted Talk](#)
- [Pain Processing in the Brain: What Changes With Chronic Pain](#)



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