

What's new in pain and addiction treatment

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Project ECHO
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TEATER HEALTH SOLUTIONS

Disclosure

Neither I nor any members of my immediate family have a financial interest/arrangement or affiliation that could be perceived as a real or apparent conflict of interest related to the content or supporters of this activity.

Pain

An unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage

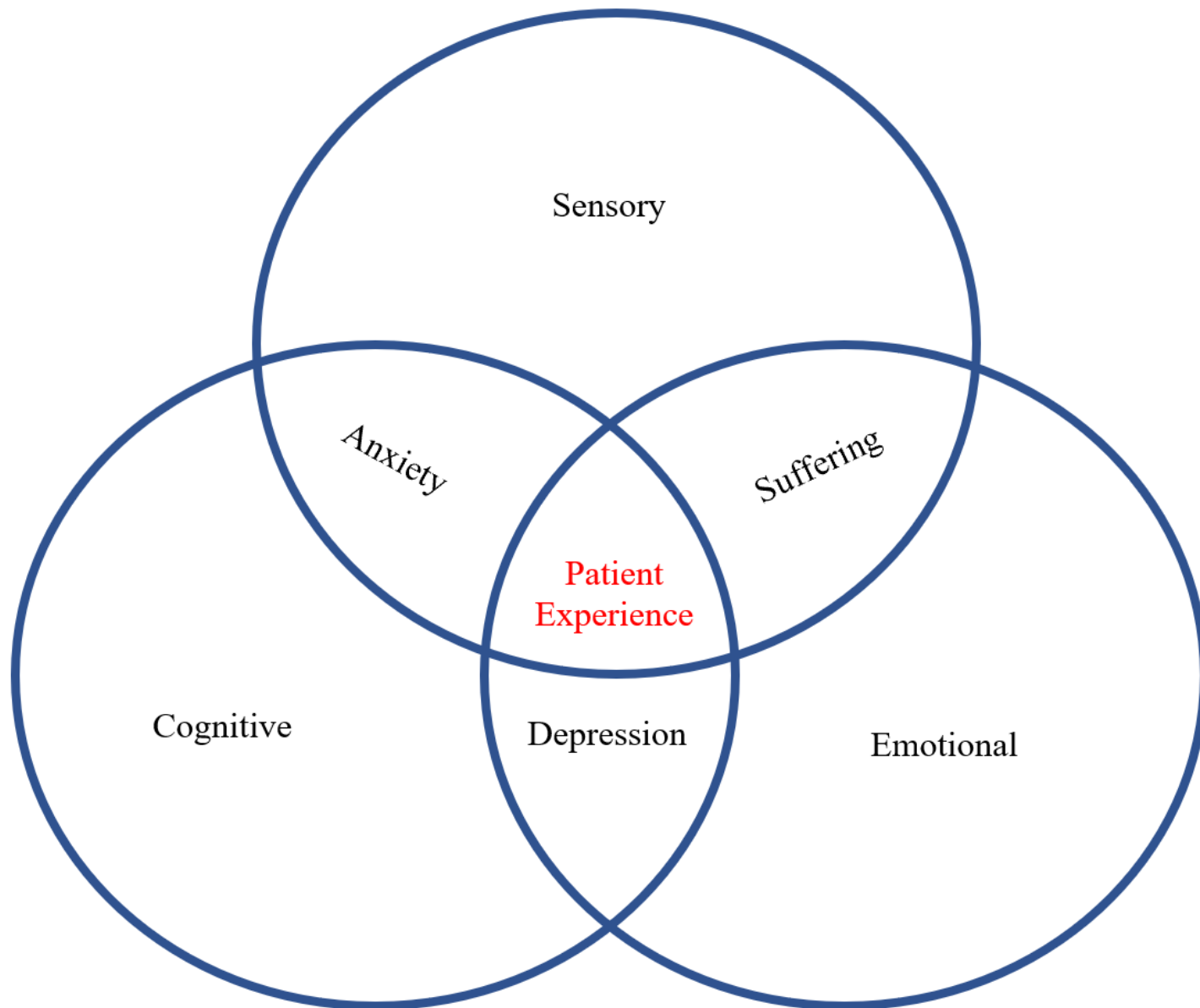
International Association for the Study of Pain (2020)

Pain

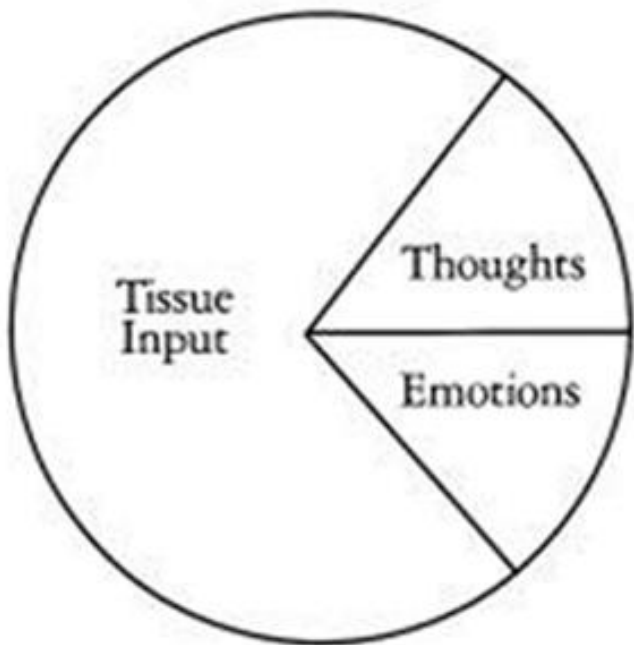
and cognitive

An unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage

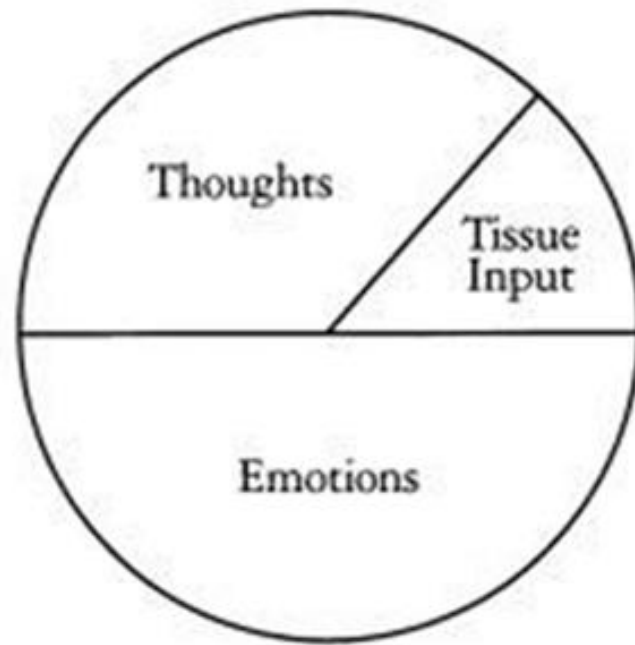
International Association for the Study of Pain (2020)

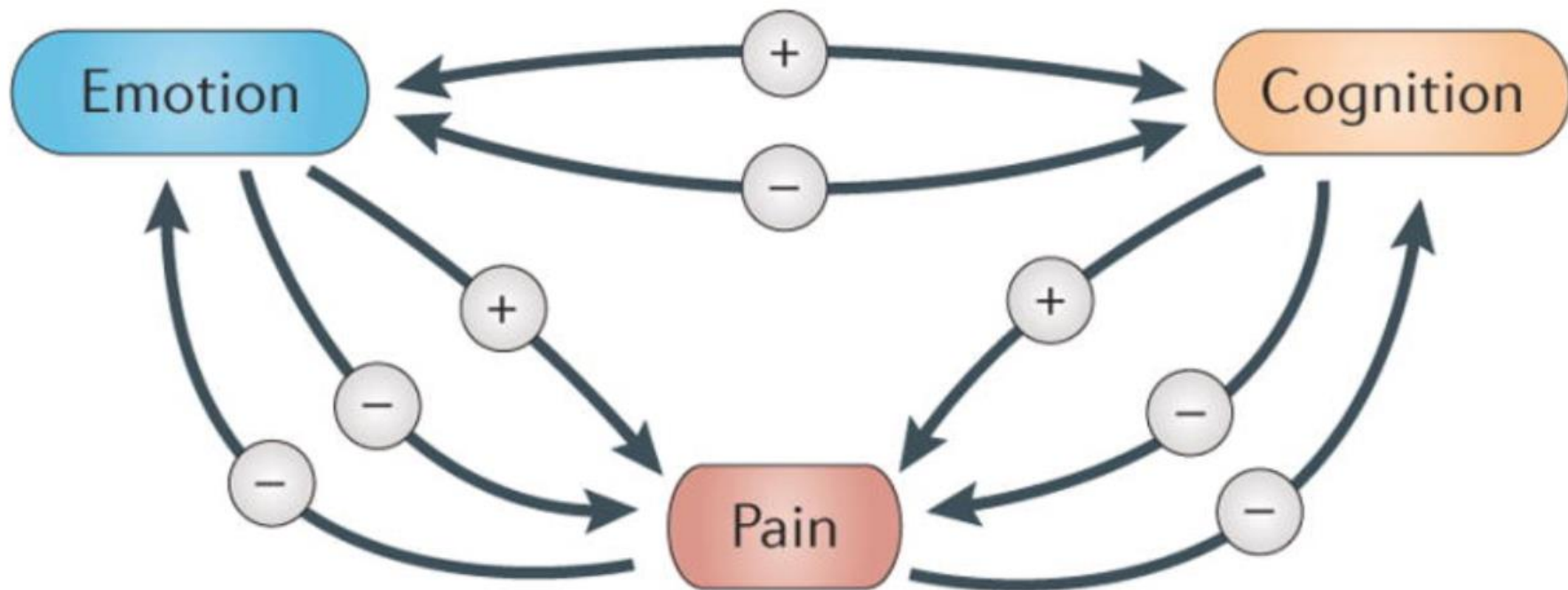


ACUTE PAIN



CHRONIC PAIN





Bushnell MC, Ceko M, Low LA. Cognitive and emotional control of pain and its disruption in chronic pain. Nat Rev Neurosci. 2013;14(7):502-511. doi:10.1038/nrn3516

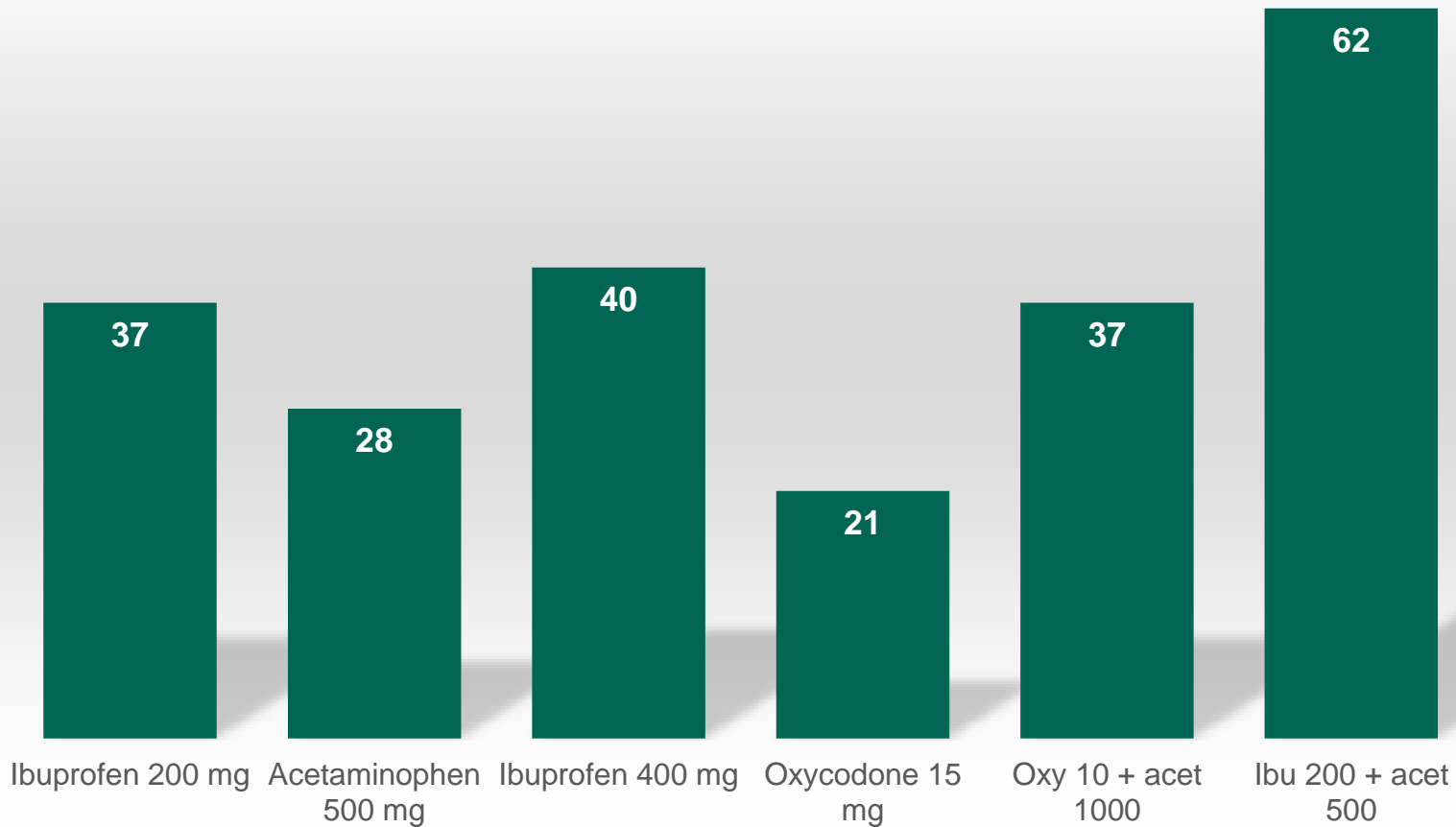
Treating Pain

Acute pain

Efficacy of pain medications

Acute pain^{26,27,51}

Percent with 50% pain relief



What's new in acute pain treatment?

Annals of Internal Medicine®

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CLINICAL GUIDELINE

Nonpharmacologic and Pharmacologic Management of Acute Pain From Non-Low Back, Musculoskeletal Injuries in Adults: A Clinical Guideline From the American College of Physicians and American Academy of Family Physicians

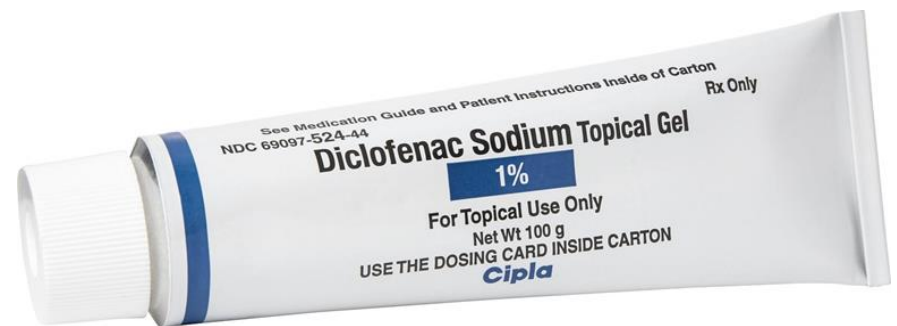
Amir Qaseem, MD, PhD, MHA; Robert M. McLean, MD; David O’Gurek, MD; Pelin Batur, MD; Kenneth Lin, MD; and Devan L. Kansagara, MD, MCR; for the Clinical Guidelines Committee of the American College of Physicians and the Commission on Health of the Public and Science of the American Academy of Family Physicians*

AAFP/ACP acute pain guidelines

- The network meta-analysis included 207 trials comprising 32,959 **adult** patients.
- Causes of acute pain varied:
 - 48% of studies included a mix of musculoskeletal injuries
 - 29% enrolled patients with sprains
 - 6% enrolled those with whiplash
 - 5% enrolled those with muscle strains
 - the remaining trials included various other injuries ranging from nonsurgical fractures to contusions.
- The median average pain score for patients at baseline was 6.49 cm on a 10-cm VAS.

Recommendation 1:

- *ACP and AAFP recommend that clinicians treat patients with acute pain from non-low back, musculoskeletal injuries with **topical nonsteroidal anti-inflammatory drugs (NSAIDs) with or without menthol gel** as first-line therapy to reduce or relieve symptoms, including pain; improve physical function; and improve the patient's treatment satisfaction (Grade: strong recommendation; moderate-certainty evidence).*



Recommendation 2a:

- *ACP and AAFP suggest that clinicians treat patients with acute pain from non-low back, musculoskeletal injuries with **oral NSAIDs** to reduce or relieve symptoms, including pain, and to improve physical function, **or with oral acetaminophen** to reduce pain (Grade: conditional recommendation; moderate-certainty evidence).*

Recommendation 2b:

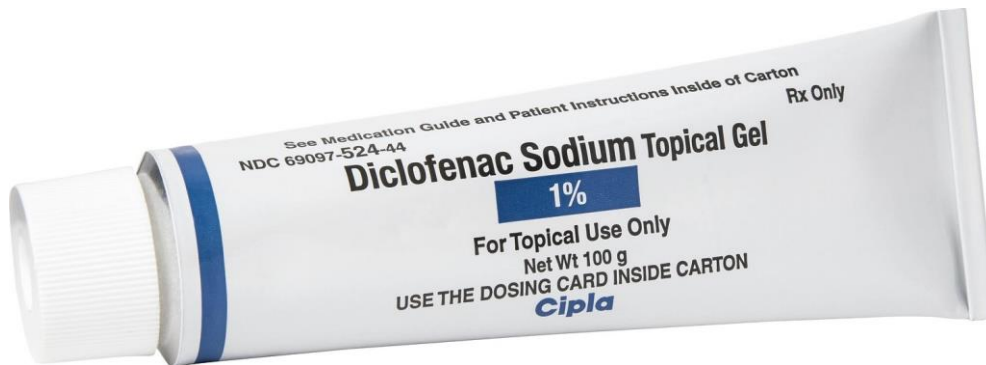
- *ACP and AAFP suggest that clinicians treat patients with acute pain from non-low back, musculoskeletal injuries with **specific acupuncture** to reduce pain and improve physical function, or with **transcutaneous electrical nerve stimulation** to reduce pain (Grade: conditional recommendation; low-certainty evidence).*

Recommendation 3:

- *ACP and AAFP suggest **against** clinicians treating patients with acute pain from non-low back, musculoskeletal injuries with **opioids, including tramadol** (Grade: conditional recommendation; low-certainty evidence).*

Topical NSAID

- Typically, this is diclofenac 1% gel
- May be more effective WITH menthol
- Appears to be very safe
- Similar efficacy to oral NSAIDs at 6 and 12 weeks

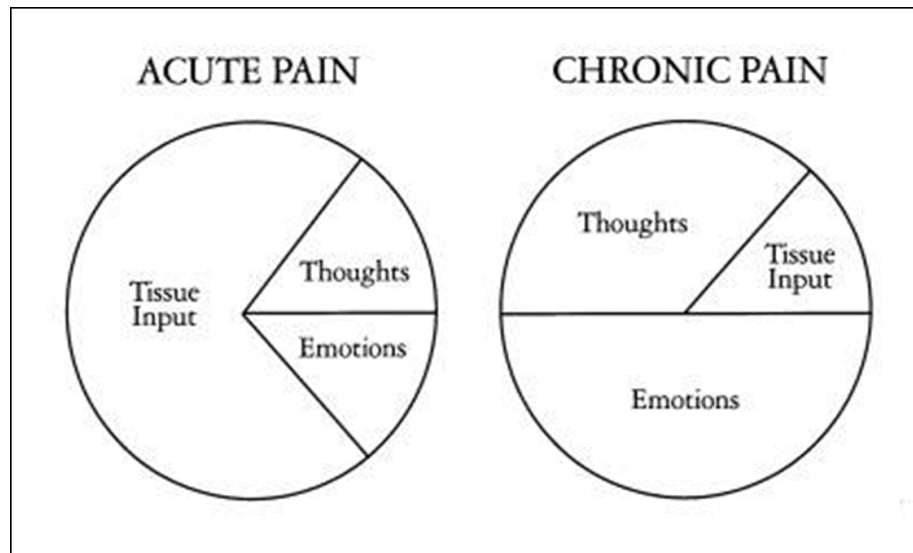


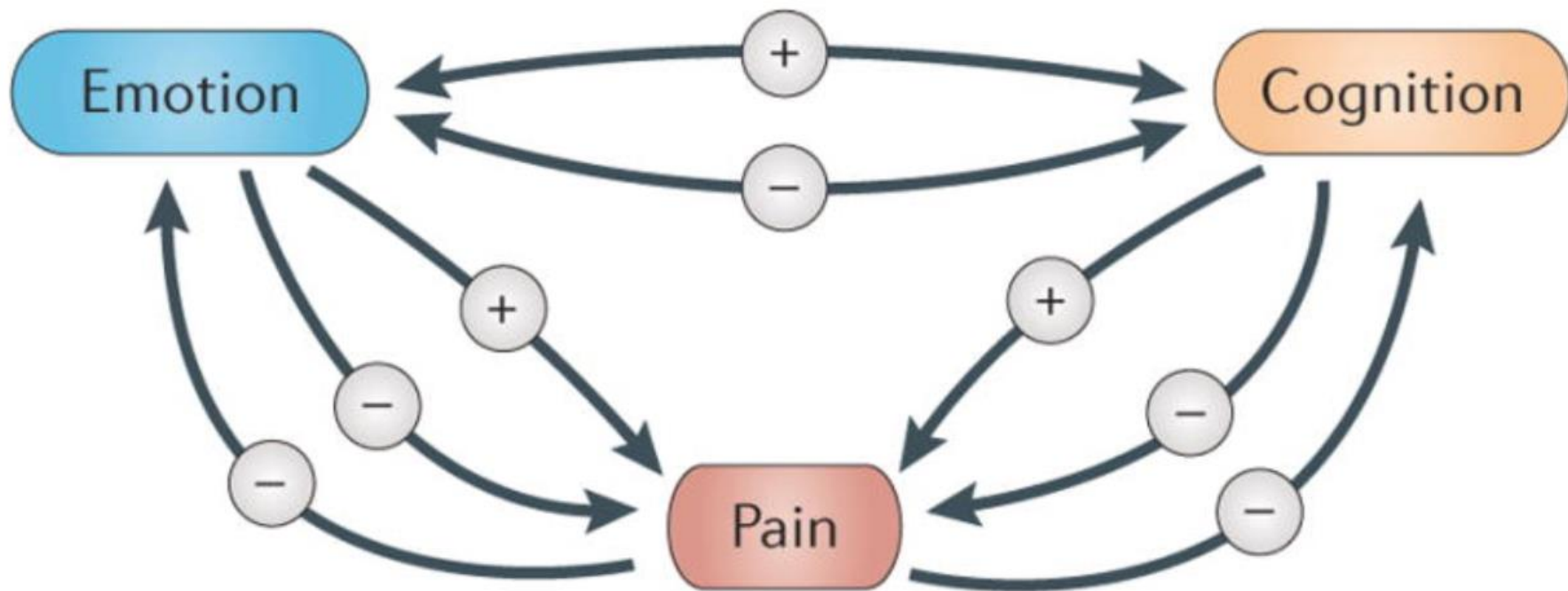
- Icy Hot – menthol
- Biofreeze – menthol
- BenGay – menthol + methyl salicylate
- Salonpas – menthol + methyl salicylate

Chronic pain

Chronic pain

- Completely different from acute pain!
- If the pain is severe or disabling, **MOST** is from central sensitization and/or opioid withdrawal!
 - Pain medications will not work well on this type of pain.





Bushnell MC, Ceko M, Low LA. Cognitive and emotional control of pain and its disruption in chronic pain. *Nat Rev Neurosci.* 2013;14(7):502-511. doi:10.1038/nrn3516

Treatment of chronic pain

- Behavioral therapy³³
 - CBT, mindfulness,
- PT, OT
 - Pain neuroscience education (noigroup.com)
- Treatment of mood disorders
- Exercise
- Acupuncture, acupressure, yoga and other alternative therapies
- Amitriptyline, duloxetine, gabapentin and similar drugs may help a little (10-30%)
- Others: Diet, sleep

CBT for pain

- Set obtainable goals and work toward achieving them.
- Identifies and responds to automatic negative thoughts (catastrophizing)
- Instructs and works with patients to gradually increase exercise and activity
- Helps patients understand that some of their negative emotions lead to behaviors that increase their pain
- Identify and address thought distortions
- Stress management
- Sleep hygiene
- Others....

If you choose to start an opioid for chronic pain

- Consider buprenorphine

Buprenorphine for chronic pain

- As effective as other opioids for chronic pain
- High affinity for the opioid receptor
 - Usually blocks the effects of other opioids
- Slow onset of action (Don't feel "high")
- Tolerance does not develop (NMDA antagonist)
- Has a ceiling effect on respiratory depression
 - But not pain relief!
- Is a wonderful antidepressant (kappa blocker)

Buprenorphine also...

- Is effective in neuropathic pain
- Is not immunosuppressive
- No hormonal effects
 - HPA axis
 - Sex hormones - testosterone
- Is less impairing
- Safe in renal insufficiency or renal failure
- Easier to wean

If your patient is already on chronic opioid tx:

- Consider changing to buprenorphine
 - Significant improvement in pain
 - Less risk
 - Less impairment
 - Improves mood

Impact of dose escalation:

- Two studies on the same population (over 53,000 military veterans with chronic pain on opioids)
- Compared to those who did not increase opioid dose, those who did experienced:
 1. More pain
 2. Worse outcomes (development of SUD, drug or alcohol related accidents, overdoses or self-inflicted injuries)

Hayes CJ, Krebs EE, Hudson T, Brown J, Li C, Martin BC. Impact of opioid dose escalation on pain intensity: a retrospective cohort study. *Pain*. 2020;161(5):979-988. doi:10.1097/j.pain.0000000000001784

Hayes CJ, Krebs EE, Hudson T, Brown J, Li C, Martin BC. Impact of opioid dose escalation on the development of substance use disorders, accidents, self-inflicted injuries, opioid overdoses and alcohol and non-opioid drug-related overdoses: a retrospective cohort study. *Addiction*. Published online January 15, 2020. doi:10.1111/add.14940

What's new in addiction treatment?

EVERYONE can prescribe buprenorphine for addiction

- No training required!
- No X-license needed!
- No limits on the number of patients treated!

Microdosing

- The patient gradually increases the dose of buprenorphine over 7-10 days and stops their opioid AFTER they are on at least 16 mg per day

Buprenorphine induction with microdosing

Table 1. Buprenorphine Microdosing Protocol Used by Our Team

Day	Buprenorphine dosage	Methadone dose
1	0.5 mg ^a SL once/day	Full dose
2	0.5 mg ^a SL twice/day	Full dose
3	1 mg SL twice/day	Full dose
4	2 mg SL twice/day	Full dose
5	4 mg SL twice/day	Full dose
6	8 mg SL once/day	Full dose
7	8 mg SL in A.M. and 4 mg SL in P.M.	Full dose
8	12 mg SL/day	Stop

Terasaki, D., Smith, C., & Calcaterra, S. L. (2019). Transitioning Hospitalized Patients with Opioid Use Disorder from Methadone to Buprenorphine without a Period of Opioid Abstinence Using a Microdosing Protocol. *Pharmacotherapy*, 39(10), 1023–1029. <https://doi.org/10.1002/phar.2313>

When to use microdosing

- When your patient is on methadone
- When your patient cannot tolerate the withdrawal sx's
- If your patient has a lot of anxiety about the transition

Questions?

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