Alternatives to Opioids

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SIU MEDICINE
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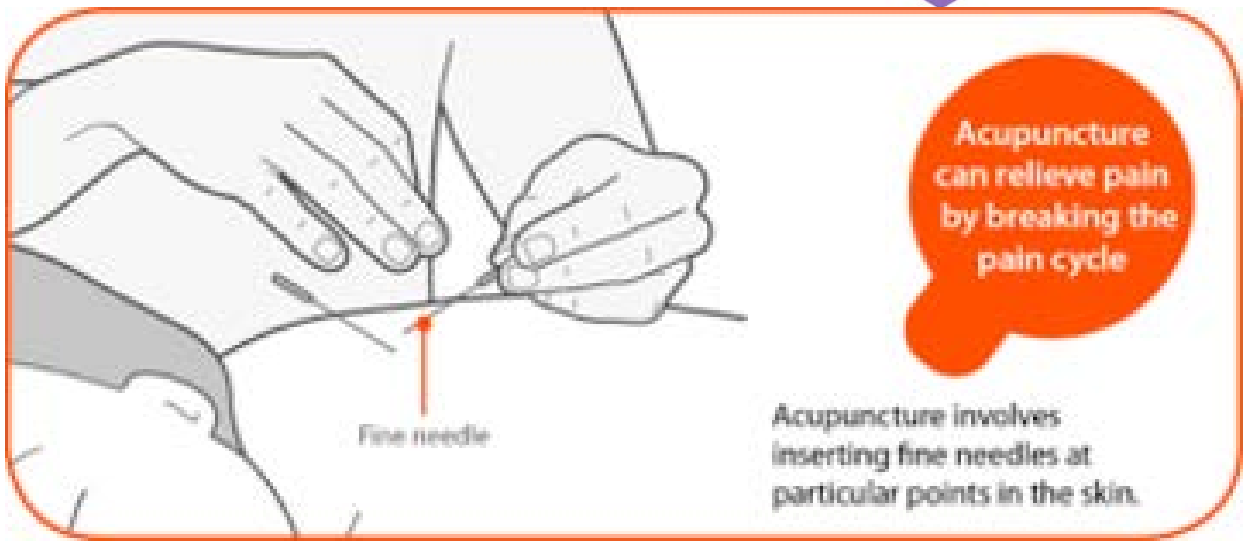
NON-PHARMACOLOGICAL TREATMENTS

- Exercise therapy
- Heat/Cold therapy
- Yoga
- Tai Chi

Mentalcrumble.com

- Acupuncture



http://www.pwpmassage.com/acupuncture.html

- Massage therapy
  and myofascial release

- Osteopathic Manual Medicine techniques

- Chiropractic treatment
- Cognitive Behavioral Therapy
- Hypnosis

CASE STUDY

65 year old female presents with a complaint of pain like “pins and needles” in her feet for the past few months. She has a history of Type II Diabetes Mellitus and Stage III Chronic Kidney Disease. Physical examination is significant for diminished sensation in the bilateral lower extremities. EMG is consistent with a diabetic neuropathy. What is the best treatment?

A) Gabapentin 300 mg TID

B) Ibuprofen 800 mg TID

C) Lorazepam 4 mg QHS

D) Hydrocodone 10 mg BID

PHARMACOLOGICAL TREATMENTS

- NSAIDs and cyclooxygenase 2 (COX-2) inhibitors

- Acetaminophen

- Muscle Relaxants
  - Data does not support long term use
  - CNS depression especially when combined with alcohol, benzodiazepines, opioids.

- Topical Agents:
  - Lidocaine
  - Diclofenac: less systemic absorption
  - Capsaicin: depletes substance P and may take weeks to reach full effect,
    - adverse effects >> burning and erythema.

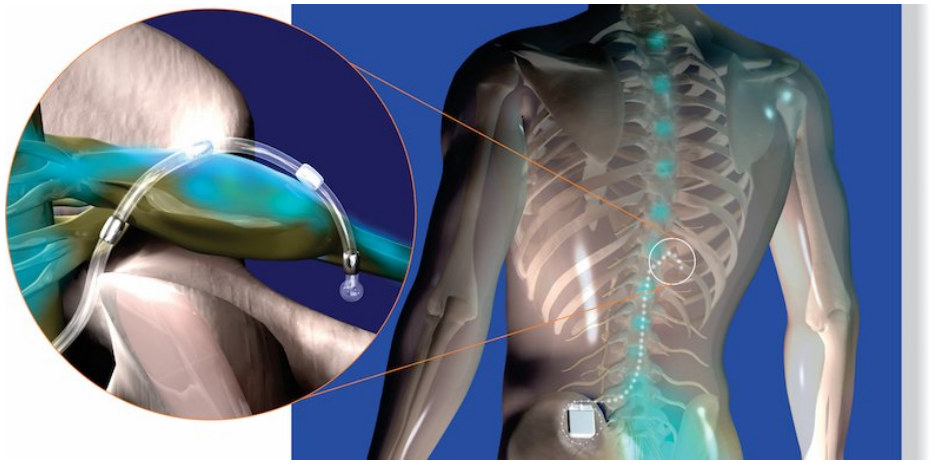
- Anticonvulsants:
  - Carbamazepine: FDA approved for trigeminal neuralgia
    - Maintenance: 400 – 800mg/day
  - Gabapentin: FDA approved for post herpetic neuralgia (PHN); fibromyalgia and diabetic polyneuropathy (PN), off-label
    - maintenance: 1800 – 3600mg
  - Pregabalin (Lyrica): Indicated for Diabetic neuropathy, PHN, fibromyalgia, spinal cord injury
    - Maintenance: 150 – 300mg/day

- Selected antidepressants
  - Serotonin Norepinephrine Reuptake Inhibitors (SNRI's)
    - Duloxetine: Goldstein et. al, (2005): significant number of pts with diabetic PN reported 50% reduction in pain vs placebo
      - FDA: diabetic PN, fibromyalgia, chronic musculoskeletal pain
    - Venlafaxine: pain relief achieved at higher doses ranging up to 225 mg/day, may cause elevated BP
      - diabetic PN and migraine prevention (off-label)

- Tricyclic Antidepressants (TCA's)
  - Amitriptyline: 10 - 25 mg once daily at bedtime; maintenance dose range 75mg - 150 mg/day
    - Off-label use: PHN, fibromyalgia, diabetic PN, migraine prevention
  - Nortriptyline: 10 - 25 mg once daily at bedtime; maintenance dose range 75mg - 150 mg/day
    - Off-label use: PHN, myofascial and orofacial pain, diabetic PN
  - Adverse effects: sedation, confusion, anticholinergic, arrhythmias

Interventional:

- Electric nerve stimulation
  - Dorsal Root Ganglion (DRG) Therapy



Paindoctor.com

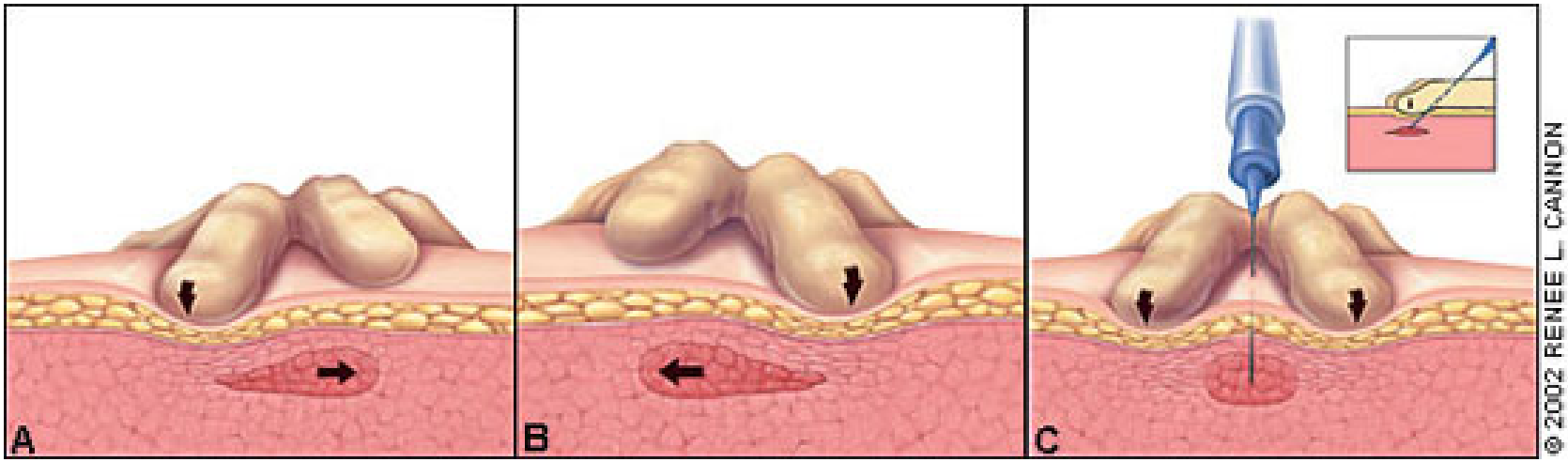
  - Spinal Cord Stimulation (SCS)

- Epidural

- Regional Anesthesia: peripheral and plexus nerve blocks, sympathetic nerve blocks (Complex regional pain syndrome), some types of chronic stomach pain

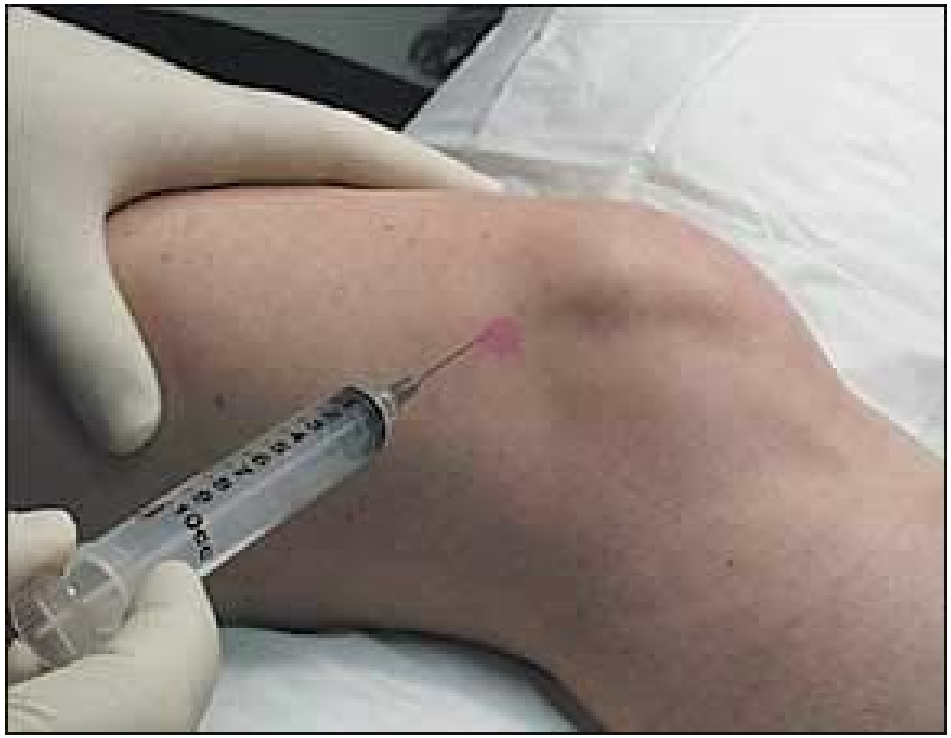
- Facet joint injections and more long term radiofrequency ablation: reported improvement of over one year

- Trigger point injections



American Family Physician AAFP

- Intra-articular therapies



DETERMINING WHEN TO INITIATE OR CONTINUE OPIOIDS FOR CHRONIC PAIN

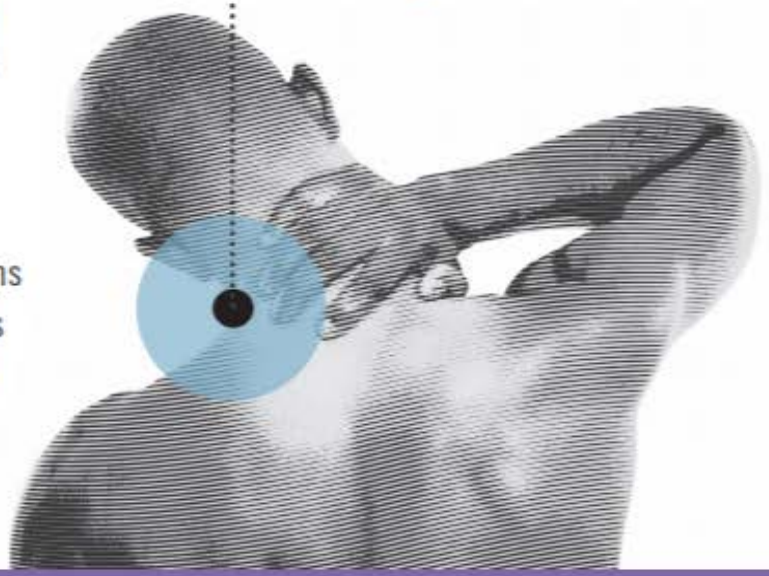
1. Nonpharmacologic therapy and nonopioid pharmacologic therapy are preferred for chronic pain. Clinicians should consider opioid therapy only if expected benefits for both pain and function are anticipated to outweigh risks to the patient. If opioids are used, they should be combined with nonpharmacologic therapy and nonopioid pharmacologic therapy, as appropriate.

2. Before starting opioid therapy for chronic pain, clinicians should establish treatment goals with all patients, including realistic goals for pain and function, and should consider how opioid therapy will be discontinued if benefits do not outweigh risks. Clinicians should continue opioid therapy only if there is clinically meaningful improvement in pain and function that outweighs risks to patient safety.

3. Before starting and periodically during opioid therapy, clinicians should discuss with patients known risks and realistic benefits of opioid therapy and patient and clinician responsibilities for managing therapy.

CLINICAL REMINDERS

- **Opioids are not first-line or routine therapy for chronic pain**
- **Establish and measure goals for pain and function**
- **Discuss benefits and risks and availability of nonopioid therapies with patient**



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

LEARN MORE | www.cdc.gov/drugoverdose/prescribing/guideline.html

CASE STUDY

26 year old male presents with severe pain in the R shoulder and chest from a motor vehicle accident. Imaging demonstrates a fractured R humerus and multiple rib fractures. He has a history of being dependent on opioids and abusing them. He has been in remission for 5 years. Urine toxicology as well as blood alcohol levels are unremarkable. What is the appropriate treatment option?

A) Toradol

B) Ice pack, Acetaminophen 500 mg BID

C) Short course of an opioid

D) Venlafaxine extended release 225 mg qday

E) A and C

SUMMARY

- Opioids should not be prescribed for chronic non-cancer pain as first-line; utilize alternatives first

- Non-pharmacological treatments for pain including therapy (like CBT), alternative and complementary medicine (e.g. acupuncture, thai chi)

- Pharmacological treatments for pain including analgesics (e.g. NSAID’s), interventional (e.g. intraarticular injections, neurostimulators), anticonvulsants (e.g. Carbamazepine), antidepressants (e.g. Duloxetine), topical agents (e.g. Lidocaine)

- Discuss goals of pain management with patients that are realistic

- Educate patients on the addiction potential of opioids

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