Injectable Buprenorphine
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Objectives

- Participants will demonstrate knowledge of proper dosage of buprenorphine for patients
- Participants will demonstrate the ability to effectively educate and collaborate with patients on the appropriate formulation of buprenorphine

Overview

- Intro into buprenorphine for MAT
  - Formulations
  - Pharmacology
- Sublocade in clinic
  - Candidate selection
  - Induction process
  - Workflow

Disclosures

- No conflict of interest to disclose

About Me

About me

- Pikeville KY
- University of Louisville SOM- 2017
    - Rural Scholar, Madisonville KY

- MAHEC Asheville NC, Family Medicine- 2020

- MAHEC Addiction Medicine Fellow- 2021
    - October 2021 Clinical Director Addiction Services SEARHC

Buprenorphine MAT

- Buprenorphine is a medication used commonly to treat opiate use disorder in an outpatient setting.
- Buprenorphine works differently that other opioids; it partially activates opioid receptors
- Buprenorphine is a partial agonist which has a “ceiling effect,” meaning larger doses do not generally increase the effect of the medication. Because buprenorphine patients generally experience weaker effects of euphoria than methadone or heroin
- Buprenorphine has a lower potential for misuse, and it diminishes withdrawal symptoms and cravings.

Buprenorphine MAT

- Many formulations of buprenorphine include the misuse deterrent naloxone (Suboxone, Zubsolv, Bunavail etc). Naloxone (Narcan)
- Naloxone (Narcan) is an antagonist, which means that it blocks the effect of opioids if the drug is misused by injecting it, making it less likely to experience a high.
- Injection of the combination product can also cause precipitated withdrawal.
- This discourages patients from misusing their buprenorphine and reduces the risk of medication diversion
- MAT with buprenorphine has a protective effect against overdose from other opioids. This is due to the high affinity of buprenorphine for opioid receptors; not from the addition of naloxone to the product.

Buprenorphine MAT

INCREASES

- Retention in treatment
- Overall functioning
- Abstinence from other opioids

DECREASES

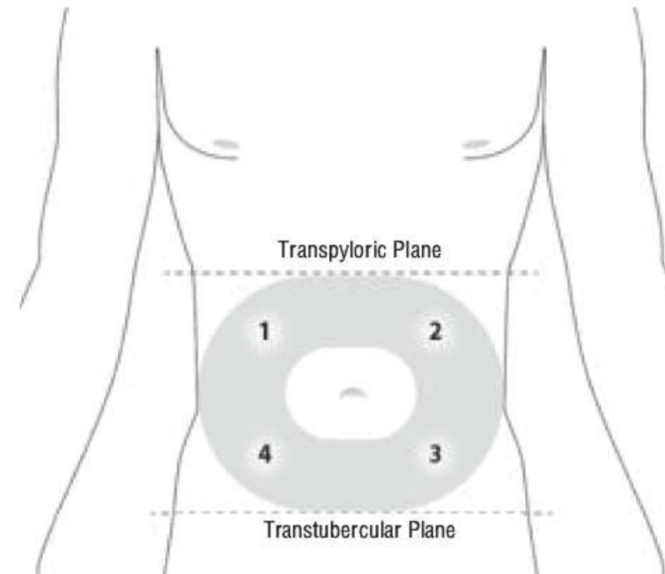
- Mortality
- Costs to patient and society
- Risk of overdose
- Risk of contracting HIV or Hep C

Sublocade

- Extended-release formulation of buprenorphine that is administered SQ
- Can be given in 30+ day intervals
- Available in 300mg, 100mg sq injections
- Supplied by specialty pharmacy for clinics to administer
  - Cannot be dispensed to patients; risk of VTE if administered IV

Sublocade

- Injected sq into rotating abdominal sites.
- Leaves small nodule which gradually dissipates over the course of weeks to months
- Local injection site reactions can happen

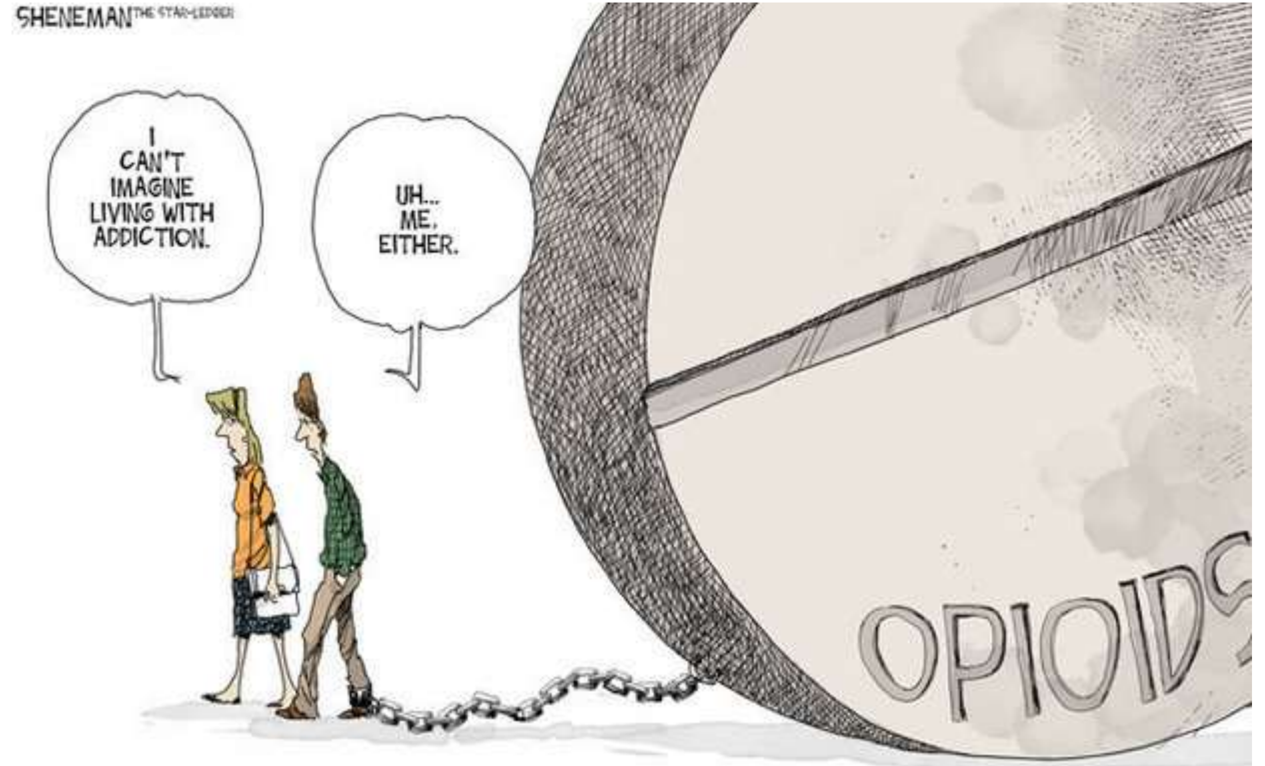


Sublocade: Who benefits?

- Patients on both ends of the use spectrum:
- Patients in active use
- Patients going into or releasing from DOC custody
  - **Harm reduction benefit; decreased risk of overdose**
  - **Patients can not self discontinue**
  - **Long life can reduce withdrawal symptoms**

Sublocade: Who benefits?

- Patients on both ends of the use spectrum
- Stable/existing patients
  - **Do not want to take daily medication**
  - **Breaking a process addiction**
  - **Patients with naloxone insensitivities**
  - **Patients with diversion history**



Sublocade: Induction

- To start, a patient must first be stabilized on sublingual buprenorphine for one week at 8 mg or higher
- Local anesthesia with topical or injectable lidocaine is useful prior to injection to reduce the pain associated with the large 19 g syringe and viscous medication
- Site injection pain, swelling and itching occur in about one in five patients and are managed supportively. Cold packs are preferred to heat as the application of heat to the site will cause increased blood levels of buprenorphine
- After injection, the depo is palpable as a firm 3 cm subcutaneous mass that will slowly shrink in size to about 1 cm over the next 4 weeks, and then gradually dissolve completely over 2-3 months. Patient pictured has had 6 injections

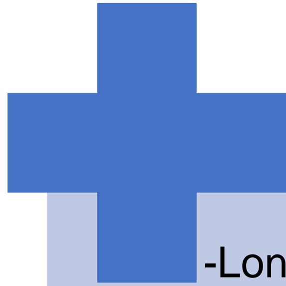
Sublocade: Induction

- Immediately after injection (300mg loading dose), the patient will no longer need to take any more sublingual buprenorphine as the blood levels after the first injection are quite high, like levels achieved by 24 mg/day sublingual dosing.
  - However, it can take time for drug levels to stabilize, and towards the end of the first month a drop in levels can cause patients to have increased cravings requiring use of supplemental sublingual doses.
- Patients initially should have injection repeated every 4 weeks with the first two months being loading doses of 300mg followed by subsequent doses of 100mg
  - Patients who continue to use IV or are at risk for fentanyl exposure can continue 300mg for better blockade effects
- After steady state has been reached in 3-4 months, patients can extend dosing interval to 6 weeks without significant withdrawal symptoms

Clinic Flow

- Example of our clinic flow; others may be used successfully
- Keep a clinic log of patients on Sublocade
  - We keep log for all patients receiving long-acting injectable meds (Invega etc)
- Typically schedule patient for follow-up at time of first administration
- Call to confirm ~7 days before appointment prior to ordering medication (reduce losses)
- Medication may remain on site for only 14 days and then must be disposed of (DEA requirement NOT a manufacturer requirement)
  - Wasted med can go in cactus sink or activated charcoal (Deterra)
- Administered by RN or LPN

Sublocade vs buprenorphine



-Long acting

-No addition of naloxone

-Patients cannot discontinue

-Longer acting overdose protection

-Less diversion potential

-Dosing flexibility

-Expensive

-Injections can be painful and still require monthly visits

-Patients can have process addictions that this does not address

-Not easily reversable in the event of negative reaction

Other clinical considerations

- Hospitalized patients will need higher doses of opioid medications for severe pain. Use agents with higher binding affinity for opiate receptors for greater effect like fentanyl/hydromorphone(Dilaudid)
- Lots of workflow considerations
- Expensive but covered by Alaska Medicaid. Varies greatly in other states.
- Consider additional SL buprenorphine 8mg for patients continuing to use or experience cravings
- Can be used to transition people off buprenorphine as levels can take many months to dissipate entirely
    - UDS can be positive for 12+ months after stopping medication

Questions?

SEARHC
SOUTHEAST ALASKA REGIONAL HEALTH CONSORTIUM