MICRODOSE BUPRENORPHINE INDUCTION

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CHRONIC PAIN & OPIOIDS ECHO

March 30, 2021

A SNEAK ATTACK …

DISCLOSURES

Jennifer Hartley has nothing to disclose.

LEARNING OBJECTIVES

01

Define buprenorphine microdosing and become familiar with several protocols

02

Review case studies on microdosing from the inpatient consult service and several outpatient settings

03

Implement microdosing in the outpatient setting

WHAT IS MICRODOSING?

(No, it does not involve psychedelics.)

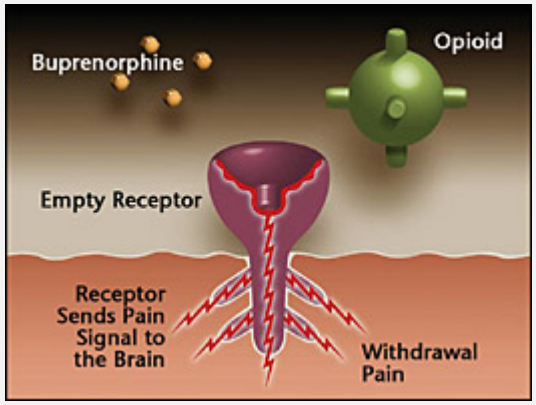
Microdose buprenorphine induction remains loosely defined as there are not yet widely validated standardized protocols.

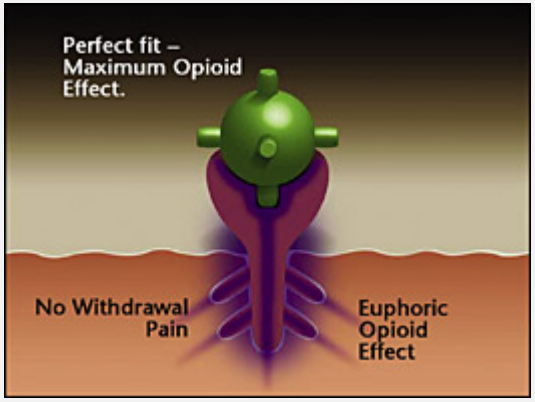
Essentially, it is an approach to starting buprenorphine that introduces the medication onto the receptors so slowly that no withdrawal of any kind is involved in the process.

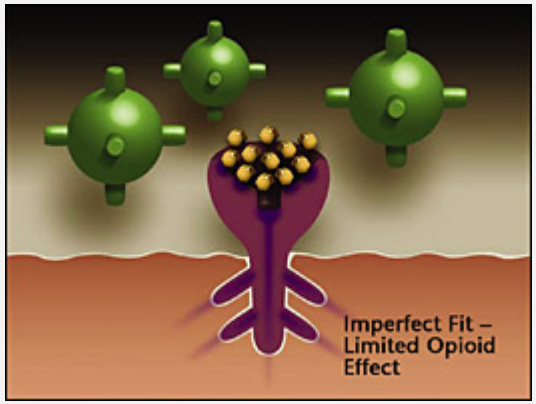
MICRODOSE BUPRENORPNE INDUCTION: AN IMPORTANT DEVELOPMENT

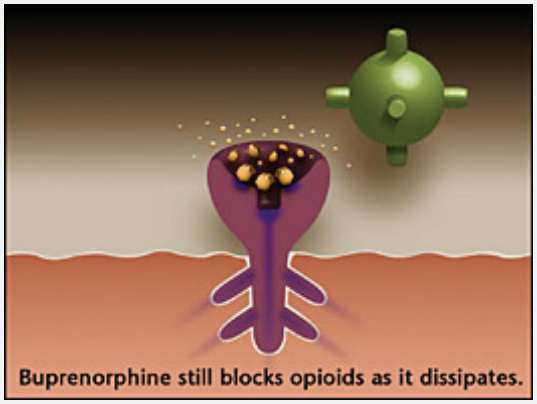
- Removes the need for patients to be in any degree of withdrawal when starting SL bup/nlx.
- Allows opioid pain medications to be administered simultaneously with induction.
- Lower risk for precipitating withdrawal.

REVIEW OF STANDARD INDUCTION









STANDARD VS. MICRODOSE

COWS OF 12	REMAIN ON FULL AGONISTS
4 mg + 4 mg	0.5 mg + 0.5 mg
8 mg + 4 mg + 4 mg	1 mg + 1 mg
	2 mg + 2 mg
	4 mg + 4 mg

TWO PRIMARY METHODS

Start a 20 mcg buprenorphine transdermal patch and gradually introduce SL bup/nlx. Then stop/taper full agonist.

2. Start sublingual bup/nlx at very low doses and uptitrate. Then stop/taper full agonist.

THE LITERATURE

First research done in Switzerland using 0.2 mg compounded doses yielded the "Bernese Method" starting with 0.5 mg doses and titrating up.

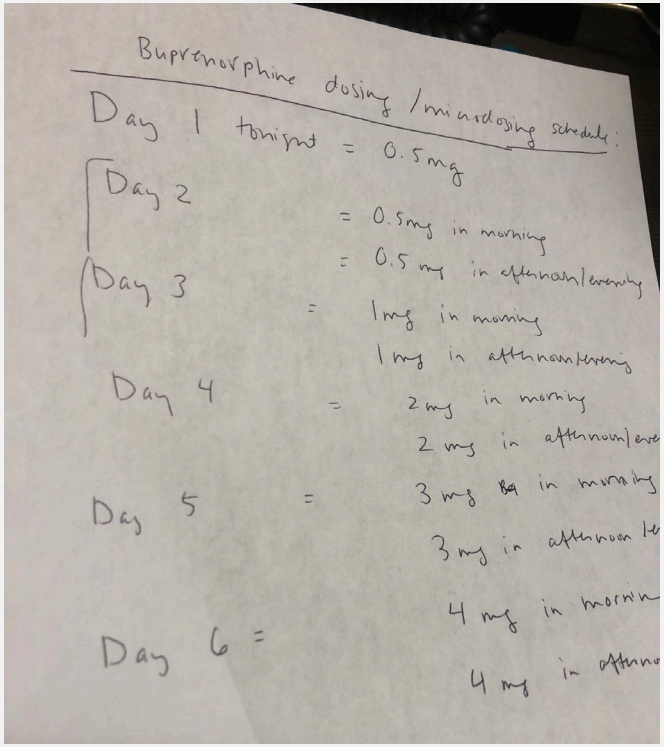
Rapidly growing number of published case reports in US and Canada have used a variety of protocols with both patches and SL dosing.

Have transitioned from methadone doses as high as 100 mg methadone.

FASTEST PROTOCOL TO DATE: LEMBKE & RAHEEMULLAH IN JAMA, MARCH 2019

- 20 mcg bup patch for 24 hours
- Day 1, give 2 mg SL bup/nlx + 2-4 mg prn doses q 2-4 hours for maximum dose of 8 mg.
- Day 2, give total from Day 1 + 2-4 mg prn doses q 2-4 hours for max dose of 16 mg.
- Remove patch after 48 hours. Discontinue full agonists not yet tapered.

HOW WE STARTED THE PROCESS AT OHSU (THANKS TO TWITTER)



IMPACT TRANSDERMAL PATCH PROTOCOL:

- Place two 10 mcg bup transdermal patches (= 20 mcg patch)
- Continue both long and short-acting opioids.
- For short-acting, can start SL bup/nlx at 24 hours; for long-acting, wait 48 hours.
- Begin SL dosing with 1 mg BID (1/2 tab).
- Day 2: 1 mg BID
- Day 3: 2 mg BID
- Day 4: 4 mg BID
- Day 5: 6 mg BID
- Day 6: 8 mg BID

IMPACT CASE: CHRONIC PAIN & OUD TRANSITIONING TO SNF

- 44 yo woman w/ severe meth use disorder, OUD in sustained remission.
- Admitted for disarticulation of R hip 2/2 chronic RLE osteomyelitis, cellulitis.
- Initially on hydromorphone PCA and oxycodone with ketamine after surgery.
- Discussion of SL bup/nlx for long-term pain control initiated early in hospitalization with pt in agreement.

- Induction deferred due to pt feeling overwhelmed
- Turnover of team, high census led to pt being ready for discharge to SNF without suboxone having been started. Still on oxycodone.
- SNF will not manage standard induction and microdose induction had already been offered to pt.
- Patch to the Rescue! ☺

- Primary team holds pt for an extra day to get induction underway.
- SNF will administer remaining SL up-titration doses and then oxycodone taper.
- Patch placed for 24 hours
- SL bup/nlx started 1 mg bid
- Pt discharged to SNF the following day. Suboxone titration and oxycodone taper went smoothly.

CASE STUDY: RETURN TO USE IN SETTING OF COVID

- 26 yo woman who had lost job and moved to a rural area after losing employment.
- Living with parents and 4 yo daughter
- Returned to use of heroin
- Had 8 mg suboxone tabs but no access to pharmacy for adjuncts that had helped with prior induction.
- Wanted to get back on suboxone but worried her parents (with whom she was living) would find out she was using.

PATIENT HAD VERY HIGH ANXIETY RE WITHDRAWAL:

- Talked through cutting 8 mg tab into 8ths on phone, then crushing 8ths and putting under tongue 2 x daily for 2 days.
- Then 1/8 tab BID x 2 days
- ¼ tab BID
- ½ tab BID
- 1 tab + ½ tab
- 1 tab BID

OUTCOME:

- Planned to quit heroin on Day 8
- Quit on Day 9 instead
- Was able to continue caring for young daughter throughout microinduction process
- Continued remote prescribing of suboxone via telehealth.
- “I never would have done this otherwise. I failed so many times on my own.”

Micro-dosing V4 (1).pdf (page 1 of 2)

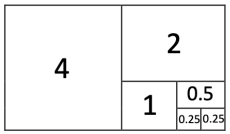
Micro-dosing V4 (1).pdf

1

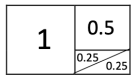
2

Micro-dosing is a way to start Buprenorphine without getting sick.

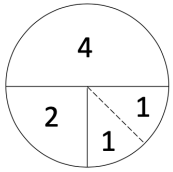
You can micro-dose with Suboxone or Subutex.



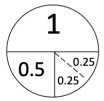
Strip: 8 mg



Strip: 2 mg



Tab: 8 mg



Tab: 2 mg

Standard Plan	Dose	Stop Heroin Day	Notes
Day 1	0.5		
Day 2	0.5 + 0.5		
Day 3	1 + 1		
Day 4	2 + 2		
Day 5	3 + 3		
Day 6	4 + 4	X	
Day 7	8 + 4 + 4		

Personal Plan	Dose	Stop Heroin Day	Notes
Day ____			
Day ____			
Day ____			
Day ____			
Day ____			
Day ____			
Day ____			
Day ____			
Day ____			

OUTPATIENT CASE STUDY, METHADONE TO BUP/NLX

55 year-old woman h/o TMJ with Teflon implants in 1980s and mult surgeries to remove material, diabetic neuropathy, untreated OSA.

Rx: methadone 180 mg per day by PCP (MEDD = 540)

Case identified by chronic opioid therapy registry of all PCP patients at OHSU internal medicine.

Patient amenable to starting taper, felt emotional clouding on methadone but no other side effects.

OUTPATIENT CASE STUDY

Tapered from methadone 180 mg to 140 mg, then patient had increase in pain and some withdrawal symptoms.

Plan: Suboxone Microinduction (using 2 mg films)

Day 1: 1/4 film under tongue ONCE

Day 2: 1/4 film under tongue AM and PM

Day 3: 1/2 film under tongue AM and PM

Day 4: 1 film under tongue AM and PM

Day 5: 2 film under tongue AM, 2 tablets PM

Day 6: 2 films under tongue AM, 2 films PM, 2 films at NIGHT

Day 7:You can increase to 8 mg films three times daily

Continue at this dose until you see Dr. Robbins

Please call our office if you need a refill

Please let us know ASAP if any issues

CASE STUDY OUTCOME

Decided to stop methadone 140 mg after completing microinduction

1 week of insomnia, bone aches, crying, then felt better

"I wasn't aware of how sedated I was, I feel more aware of what's going on."

Few months later…

"I am trying to cope with my pain. I know it won't all go away with magic pills."

SAMPLE PROTOCOL FOR HOSPITAL CHRONIC PAIN INDUCTION:

- Transition from **SHORT ACTING** full opioid agonist and **CHRONIC PAIN** indication
  - ☑ Day 1 : buprenorphine 20 mcg/hr patch, 1 patch, EVERY 7 DAYS for 1 dose
  - ☑ Day 2: buprenorphine-naloxone (SUBOXONE) 1 mg, sublingual, TWICE DAILY for 2 doses
  - ☑ Day 3: buprenorphine-naloxone (SUBOXONE) 1 mg, sublingual, THREE TIMES DAILY for 3 doses
  - ☑ Day 4: buprenorphine-naloxone (SUBOXONE) 2 mg, sublingual, THREE TIMES DAILY for 3 doses
  - ☑ Day 5: buprenorphine-naloxone (SUBOXONE) 4 mg, sublingual, THREE TIMES DAILY

POTENTIAL LIMITATIONS OF MICRODOSING

1. Withdrawal symptoms

- To date, the only symptoms have been mild, vague and non-specific.
- include insomnia, restless legs and irritability.
- none can be definitively attributed to withdrawal.

1. Cost, insurance coverage of buprenorphine patch as outpatient
2. Complexity and patient compliance – need for more discussion of process
3. Duration of microdose inductions

FUTURE DIRECTIONS & DISCUSSION

1. More research is needed on use for transitioning from methadone > 100 mg
2. Transitioning from fentanyl
3. Use in opioid treatment programs
4. Choosing "classic" over microdose

CONCLUSIONS

1. Microdose inductions are safe and feasible for inpatient and outpatient settings

2. The main benefits are avoiding planned withdrawal and minimizing risk of precipitated withdrawal associated with conventional buprenorphine induction – more flexible in a variety of settings

3. Downsides of microdose buprenorphine induction include the duration of induction, issues of complexity and compliance in outpatient settings