Workshop

Micro-dosing for induction of treatment

Ken Lee

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Buprenorphine Induction Strategies

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DISCLOSURE OF COMMERCIAL SUPPORT

• This program has received financial support from CAMH & CPSO in the form of an educational grant

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• Potential for conflict(s) of interest: there is no conflict
FACULTY/PRESENTER DISCLOSURE

• Faculty: Dr. Ken Lee

• Relationships with commercial interests:
  - Grants/Research Support: ARTIC META:PHI
  - Speakers Honoraria:
    Gilead, AbbVie, Merck, Knight, Indivior
MITIGATING POTENTIAL BIAS

- There is no conflict
The RAAM Clinic

Mondays 12:30pm - 3:00pm
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Induction Scenarios

1. Standard Induction
2. Microdosing Induction
3. Methadone Conversions
4. Street Fentanyl Induction
5. Fentanyl Patch Conversions
6. Butrans Patch Bridging
7. Pill in Pocket Induction
• 35 year old male using HydroMorph IDU several times a day
• Last used 12 hours ago
• COWS score 18 (moderate withdrawal)
Standard Induction

- Buprenorphine 2 mg to start
- Then Buprenorphine 2 mg q1h until comfortable to a max dose of 12 mg on day 1
- Followup on day 2 and titrate up to 16 mg as needed
• 35 year old male using HydroMorph IDU several times a day
• Last used this morning
• COWS score zero (not in withdrawal)
Use of microdoses for induction of buprenorphine treatment with overlapping full opioid agonist use: the Bernese method

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Background: Buprenorphine is a partial μ-opioid receptor agonist used for maintenance treatment of opioid dependence. Because of the partial agonism and high receptor affinity, it may precipitate withdrawal symptoms during induction in persons on full μ-opioid receptor agonists. Therefore, current guidelines and drug labels recommend leaving a sufficient time period since the last full agonist use, waiting for clear and objective withdrawal symptoms, and reducing pre-existing full
Buprenorphine/Naloxone Microdosing: The Bernese Method
A Brief Primer for Clinicians

Dosing schedules adapted from the PHS Health Care Columbia Street Community Clinic and St. Paul’s /VGH/RAAC clinicians

The theoretical background of this method is based on the following hypothesis:

• Repetitive administration of very small buprenorphine doses with sufficient dosing intervals should not precipitate opioid withdrawal

• Because of the long receptor binding time, buprenorphine will accumulate at the opioid receptor

• Over time, an increasing amount of a full μ-agonist will be replaced by buprenorphine at the opioid receptor

References:
• Dosing schedules adapted from the PHS Health Care Columbia Street Community Clinic and St. Paul’s /VGH/RAAC clinicians
Buprenorphine Microdosing Induction

- Day 1  0.5 mg
- Day 2  0.5 mg
- Day 3  1.0 mg
- Day 4  1.5 mg
- Day 5  2.0 mg
- Day 6  2.5 mg
- Day 7  3.0 mg
- Day 8  4.0 mg
Buprenorphine Microdosing Induction

At Buprenorphine 4 mg:

- Typically able to stop the short-acting opiate
- Titrate Buprenorphine up 2 mg q1h until comfortable to a max of 12 mg that day
Methadone Conversion

- 35 year old male using **Methadone 70 mg/day** and asking to switch to Buprenorphine
- COWS score zero (not in withdrawal)
Methadone Conversion

- Day 1  BUP 0.5 mg + MTD 70 mg
- Day 2  BUP 0.5 mg + MTD 70 mg
- Day 3  BUP 1.0 mg + MTD 70 mg
- Day 4  BUP 1.5 mg + MTD 70 mg
- Day 5  BUP 2.0 mg + MTD 70 mg
- Day 6  BUP 2.5 mg + MTD 70 mg
- Day 7  BUP 3.0 mg + MTD 70 mg
- Day 8  BUP 4.0 mg + MTD 60 mg
Methadone Conversion

- Day 9  BUP 5 mg + MTD 50 mg
- Day 10 BUP 6 mg + MTD 40 mg
- Day 11 BUP 7 mg + MTD 30 mg
- Day 12 BUP 8 mg + MTD 20 mg
- Day 13 BUP 10 mg + MTD 10 mg
- Day 14 BUP 12 mg + MTD 5 mg (or none)
- Day 15 BUP 12 mg + titrate BUP up to 16 mg if needed (Clonidine 0.1 mg tid prn)
• 35 year old male using **Street Fentanyl** several times a day
• Last used this morning
• COWS score zero (**not in withdrawal**)
Street Fentanyl Inductions

• No withdrawal – proceed with microdosing induction

• Lots of withdrawal – start at Buprenorphine 2 mg but will often get precipitated withdrawal with a 2\textsuperscript{nd} BUP 2 mg dose. Microdose up from BUP 2 mg. Reassess at BUP 4 mg and make some decisions on how to proceed.
Street Fentanyl Inductions

• No withdrawal – proceed with microdosing induction to 4 mg
• Advise not to use Street Fentanyl (many substitute with other opiates)
• Reassess at BUP 4 mg and decide:
  – Continue BUP microdosing to 8 mg
  – Proceed with a Standard Induction
Fentanyl Patch Conversions

- d/c Fentanyl patch 48 hrs and cover with short-acting opiate equivalents
- No short-acting opiates after midnight
- Proceed with a Standard Induction in the morning
Fentanyl Patch Conversions

- Microdose BUP to 4 mg,
  - Start reducing the Fentanyl patch daily
  - Continue BUP microdosing to 8 mg
  - Titrate BUP up as needed after the Fentanyl patches are gone
Butrans patch bridging

- Day 1 0.5 mg
- Day 2 0.5 mg
- Day 3 1.0 mg
- Day 4 1.5 mg
- Day 5 2.0 mg
- Day 6 2.5 mg
- Day 7 3.0 mg
- Day 8 4.0 mg

Butrans 20 ug/hr patch
Butrans patch bridging

- Use Butrans 20 ug/hr patch x 1 week
- Can try adding a 2nd Butrans patch
- This avoids the ¼ pill steps
- But the Butrans patch is expensive
- Micro-dose up from BUP 1 mg/day and reassess at BUP 4 mg
Pill in Pocket Inductions

• Patient using opiates (but not Street Fentanyl) presents in no withdrawal
• Give the patient a BUP 8 mg tab and tell them to take it when they are in lots of withdrawal
• Come to the RAAM Clinic the next day to complete the BUP induction
Buprenorphine Induction Strategies

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