Buprenorphine for Pain: Use of Transdermal, Buccal, and Transition from Full Agonist Prescription Opioids to Sublingual Route for Pain, With or Without a Component of Opioid Use Disorder

General Considerations

1. Buprenorphine is a Schedule III medication – refills are permitted up to 6 months; RX can be phoned in
2. Lower misuse and overdose risk compared to Schedule II full-agonist opioids
3. Better mood effect while other opioid side effects may be similar to full-agonist opioids
4. Little or no drug tolerance seen over time
5. Urine testing: *Know your lab.* Buprenorphine is not detected by the "opioid" test on EIA screens (Drug6 at UM); is not detected by gas chromatography. Buprenorphine is detected by the UM clinic Drug10 and UM Controlled Med Management (LC-MS) Panel.

Opioid Patient Pre-treatment information

1. Have a clear diagnosis and plan for your patient
2. Agree on treatment goals and plan for off ramp if not working (functional improvement, safer medication regimen, improved pain control, etc.)
3. Identify any complexities that may require subspecialty care: uncontrolled major psychiatric disorder, current benzodiazepine use disorder, current alcohol use disorder, other active SUD, pregnancy
4. Check PDMP (MAPS in Michigan)
5. If tramadol in use, no buprenorphine induction protocol needed
6. Perform urine drug screening with confirmatory testing if results are unexpected
7. Offer counseling services
8. Use Start Talking form (in MI)
9. Instruct patient on the proper use of transdermal, buccal, or sublingual medication
10. In general, prescribe the abuse deterrent sublingual formulations of buprenorphine/naloxone (Suboxone™ or other)

Understand Morphine Mg Equivalent Daily Dosing (MMED) -- (MS = oral morphine mg)

Opioid	Relative potency	Opioid	Relative potency	Opioid	Relative potency
Tapentadol mg	= MS mg x 0.4 *	Oxycodone	= MS x 1.5 **	Hydromorphone	= MS x 4-5
Hydrocodone	= MS	Heroin	= MS x 2.5	Fentanyl →	1 mcg/hr approx. 2 mg/day MS
Butorphanol	= MS	Oxymorphone	= MS x 3-4	Methadone	= 4-20 x MS potency

* Example: Tapentadol 100 mg = 40 mg morphine equivalent ** Example: Oxycodone 20 mg = 30 mg morphine

Prescribing Principles

Transdermal buprenorphine (Butrans™ or generic)

1. Dose range 5-20 mcg patch applied once/week, covers up to 80 MMED. Start patch 1/week as in Table:

Current MMED	Recommended Initial Dose
≤ 15 (includes opioid naïve patient)	5 mcg/hr
15-29	7.5 mcg/hr
≥ 30	10 mcg/hr

2. If needed during build-up in first day only, patient may use their full agonist medication for 1 or 2 doses, then stop
3. Wait 7 days to titrate transdermal buprenorphine
4. Patches may be cut if necessary
5. Insurance often will not cover TD buprenorphine
6. Do not stop before, during, or after surgery or procedures. Supplement with NSAID or oral opioid if needed
7. Irritated skin at patch site might be improved by pretreatment of skin with nasal fluticasone

Buccal buprenorphine (Belbuca™)

1. Dose range 75-1800 mcg/day divided to BID or TID doses, covers up to 160 MMED. Start strips as in Table:

Current MMED	Recommended Initial Daily Dose
≤ 30 (includes opioid naïve patient)	75-150 mcg divided to BID or TID
30-90	150-300 mcg divided as above
≥ 90	300-600 mcg divided as above

2. If needed during build-up in first day only, patient may use their full agonist medication for 1 or 2 doses, then stop
3. Do not titrate buccal buprenorphine for at least 4 days.
4. Patches may be cut if necessary
5. Insurance often will not cover buccal buprenorphine
6. Do not stop before, during, or after surgery or procedures. Supplement with NSAID or oral opioid if needed

Sublingual buprenorphine (Suboxone, Zubsolv, geneic buprenorphine/naloxone strips or tablets)

1. Films may be cut into halves or even smaller
2. Films should be held under the tongue for 5 minutes; tablets for 10 minutes, without eating, drinking, talking
3. Use of the Clinical Opioid Withdrawal Scale (COWS) is not necessary for pain patients
4. Avoid weekend calls for refills – write prescriptions in 1-4 wk (7, 14,21,28 day) amounts, not 30 days
5. With a clear plan, buprenorphine may be initiated at home
6. Write "for pain" on the buprenorphine rx when appropriate and prescribe off-label with your "regular" DEA.
7. Medicaid will not pay for "pain" and an XDEA must be used
8. Delay benzo taper until stable after conversion to buprenorphine
9. See UM guide for peri-procedure buprenorphine management
10. Contact the Michigan Opioid Collaborative for needed assistance
11. Dose TID or even QID for pain, BID for OUD

Choice of sublingual buprenorphine dosing ranges and transition protocol is based on opioid(s) currently being used (short-intermediate-long acting) as in Table:

1. Short-acting opioids (codeine, tapentadol, hydrocodone, morphine IR, oxycodone IR, oxymorphone IR, hydromorphone)				
Preparation If prior pill dose is > 180 MMED, taper to ≤ 180 by 10% of total every 4 days.	Opioid-free interval 12 hours	Transition dosing 1 mg SL Q30 min x 4 doses (OK to combine the third and fourth doses if there is regression of pain or withdrawal symptoms at 1 hr). After 4 hr, continue that day with target dose.	Initial target dose in (mg/day) • < 50 MMED → 0.5-3 (divide into 3 doses for pain patients) • 50-150 MMED → 3-6 • > 150 MMED → 6-8	Comments • For OUD patients, divide total into 1-2 doses/day, use higher end of range. • For patients with pain > OUD, divide into 3-4 doses/day at lower end of range
2. Intermediate-acting opioids (morphine ER, oxycodone ER)				
Preparation • If on Kadian, convert to equal amount of morphine ER *** divided into 3 doses • If prior dose is > 180 MMED, taper to ≤ 180 by 10% of total every 4-7 days	Opioid-free interval 12 hours	Transition dosing 1 mg SL Q30 min x 4 doses (OK to combine the third and fourth doses if there is regression of pain or withdrawal symptoms at 1 hr). After 4 hr, continue that day with target dose.	Initial target dose (mg/day) • < 50 MMED → 0.5-3 (divide into 3 doses for pain patients) • 50-150 MMED → 3-6 • > 150 MMED → 6-8	Comments • For OUD patients, divide total into 1-2 doses/day, use higher end of range. • For patients with pain > OUD, divide into 3-4 doses/day at lower end of range

*** Example: MS Contin or its generic

3. Long-acting opioids (fentanyl patches, methadone) – "Bridging" with short-acting opioid permits symptom control during clearance. *IN GENERAL, WE RECOMMEND CONFIRMING THE PLAN WITH A CONSULTANT FAMILIAR WITH THIS PROCESS*				
<u>Preparation (get help if not able to taper)</u> *Fentanyl prior dose* • > 75 mcg/h – taper by 12 mcg every 6-9 days • ≤ 75 mcg/h, proceed to "bridging" *Methadone prior dose* • ≤ 80 mg/day – taper by 5 mg each week • > 80 mg/day – taper by 10 mg each week	<u>"Bridging" treatment</u> 1. Stop fentanyl or methadone on the morning of day 1. Begin morphine IR 30 mg 4-5 times per day for 5 days (7 days, if obese) 2. On the 5th night, stop morphine IR 3. Start induction on the 6th morning after no opioid x 12 h	<u>Transition dosing</u> After 12 hrs off "bridge," 1 mg SL Q30 min x 4 doses (OK to combine the third and fourth doses if there is regression of pain or withdrawal symptoms at 1 hr). After 4 hr, continue that day with target dose.	<u>Initial bup target dose (mg/day)</u> • < 50 MMED → 0.5-3 (divide into 3 doses for pain patients) • 50-150 MMED → 3-6 • > 150 MMED → 6-8	<u>Comments</u> • For OUD patients, divide total into 1-2 doses/day, use higher end of range. • For patients with <u>pain > OUD</u>, divide into 3-4 doses/day at lower end of range **WARNING: Transition from long-acting opioids can be more challenging than from shorter acting agonists. Get help from an experienced consultant.**

Additional Resources:

- Converting prescription opioid doses into MME: https://www.mdcalc.com/morphine-milligram-equivalents-mme-calculator
- Butrans official site: https://butrans.com/dosing/prescribing-considerations.html
- Belbuca official site: https://www.belbuca.com/hcp#
- Michigan Medicine Ambulatory Pain Management Guidelines: https://michmed-public.policystat.com/policy/7109483/latest/

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