



# ADDICTION AND PAIN

Patrick Marshalek, MD



# Two common problems

- Increasingly common
  - *Increasing overlap*
- Relationship between opioid epidemic and management of chronic pain
  - *Problems related to focus*
- Treatment of pain leading to addiction
- Addiction leading to pain
  - *Trauma*
  - *IVDU complications*
- After a certain point, matters less which came first
  - *Both can be managed*
- Dual Dx

# Addiction

- Opioid dependent
- Use, misuse, abuse
- Dependence, tolerance and withdrawal
- DSM-5
  - *Opioid Use Disorders*
    - Mild, moderate, severe, on agonist therapy
- Oxycotin 80 mg q12 vs 10 “stamps” per day IV heroin
  - *Physiologically similar*
  - *Management similar*
    - later

# Pain

- *“Insert definition here”*
- Emotional
- Physical
- On a scale of 1-10
  - *12/10*
- Acute
  - *Local tissue injury*
- Chronic
  - *Where does it live once it becomes chronic*

# Opioids

- Analgesic
- Antidepressant
- Anxiolytic
- Euphoriant
- If the reason for pain (acute or chronic) has been addressed but continued need
  - *Question the above*
- Before you go down this road
  - *Question the above*

# Opioids for chronic pain?

- Agree or disagree no shortage of patients on these medications
  - *2 pools*
    - Shut off faucet
    - What to do w excess water?
- Not comfortable with this regimen
  - *How did they arrive there*
    - Not easy to clarify in current climate
    - Not easy for patients to seek care
    - “Pain Refugee”
- Easy to say things got of out hand
  - *Hard to work backwards from current point*
  - *CDC, SEMP*
    - Taper
    - Maintenance

# Risk Assessment

- Chart Review
- History and Clinical Assessment
- Opioid Risk Tool/ SOAPP-R
- Collateral from friends/family members
- Interdisciplinary communication

# Risk Stratification

- Not a bad idea to think about risks
- How much time and energy do you spend on this
- Can be perceived by patients as an extra hoop to jump through
- Some move through the system easier than others







# Opioid-Risk Tool

Medscape®		www.medscape.com	
Item	Mark each box that applies	Item score if female	Item score if male
1. Family history of substance abuse			
Alcohol	<input type="checkbox"/>	1	3
Illegal drugs	<input type="checkbox"/>	2	3
Prescription drugs	<input type="checkbox"/>	4	4
2. Personal history of substance abuse			
Alcohol	<input type="checkbox"/>	3	3
Illegal drugs	<input type="checkbox"/>	4	4
Prescription drugs	<input type="checkbox"/>	5	5
3. Age (mark box if 16 to 45)	<input type="checkbox"/>	1	1
4. History of preadolescent sexual abuse	<input type="checkbox"/>	3	0
5. Psychological disease			
Attention deficit disorder, obsessive compulsive disorder, bipolar, schizophrenia	<input type="checkbox"/>	2	2
Depression	<input type="checkbox"/>	1	1
Total		—	—
Total score risk category: low risk (0–3); moderate risk (4–7); and high risk ( $\geq 8$ ).			

## Exhibit 2-14 SOAPP–R Questions

- How often do you have mood swings?
- How often have you felt a need for higher doses of medication to treat your pain?
- How often have you felt impatient with your doctors?
- How often have you felt that things are just too overwhelming that you can't handle them?
- How often is there tension in the home?
- How often have you counted pain pills to see how many are remaining?
- How often have you been concerned that people will judge you for taking pain medication?
- How often do you feel bored?
- How often have you taken more pain medication than you were supposed to?
- How often have you worried about being left alone?
- How often have you felt a craving for medication?
- How often have others expressed concern over your use of medication?
- How often have any of your close friends had a problem with alcohol or drugs?
- How often have others told you that you have a bad temper?
- How often have you felt consumed by the need to get pain medication?
- How often have you run out of pain medication early?
- How often have others kept you from getting what you deserve?
- How often, in your lifetime, have you had legal problems or been arrested?
- How often have you attended an Alcoholics Anonymous or Narcotics Anonymous meeting?
- How often have you been in an argument that was so out of control that someone got hurt?
- How often have you been sexually abused?
- How often have others suggested that you have a drug or alcohol problem?
- How often have you had to borrow pain medications from your family or friends?
- How often have you been treated for an alcohol or drug problem?

Reprinted from Butler et al., 2008. Validation of the revised screener and opioid assessment for patients with pain. *Journal of Pain*, 9, 360–372. Used with permission from Elsevier.

# Risk Stratification

- No measures like a lab value or image
- Clinical interview
- SOAPR-R
- ORT
- Records
- Good when done but can also be used to cherry pick pts or slow movement through system

# Risk Stratification

- Good starting/teaching point
- At risk for what?
- [Low/Medium/High]
  - *Fit into one of three categories*
- Limitations
  - *Cross-section*
  - *More information the better*
    - Forensic
  - *Moving target*

# Not done with work

- Once risk assessment is completed
- Some level of ongoing reassessment or safeguards
  - *Clinical*
  - *Regulatory*
  - *Legal*
  - *Institutional*
- Some can deter/discourage pt or provider from dealing with in the first place





# Risk Modification

- Treatments
  - *Mood*
  - *Anxiety*
  - *SUD*
  - *Surgery*
  - *Wellness*
- Empirically
  - *High index of suspicion*
  - *Low risks*
    - therapy
- Do so in context of continuity allows for both modification and ongoing stratification
  - *Similar to routine clinical practice*
- Focus on

# Low Risk

- Everyone is happy/relieved
  - *Patient and provider*
    - Move through the system with ease
- Chronic pain without depression/anxiety/SUD
  - *Really?*

# Medium

- Might as well be high risk
  - *Current climate*
- Hot Potato
  - *Not it*

# High Risk

- Everyone would agree we should be careful
- Not about what to do
- Treatment withheld
  - *No opioids at any cost*
- Wrong treatment offered
  - *Only addiction treatment in form of MAT?*
  - *All or none?*

# Chronic opioids

- Long acting vs short acting
- Hyperalgesia
- Abuse deterrent
- Methadone and buprenorphine
  - *Evidence bases*
  - *Irony*

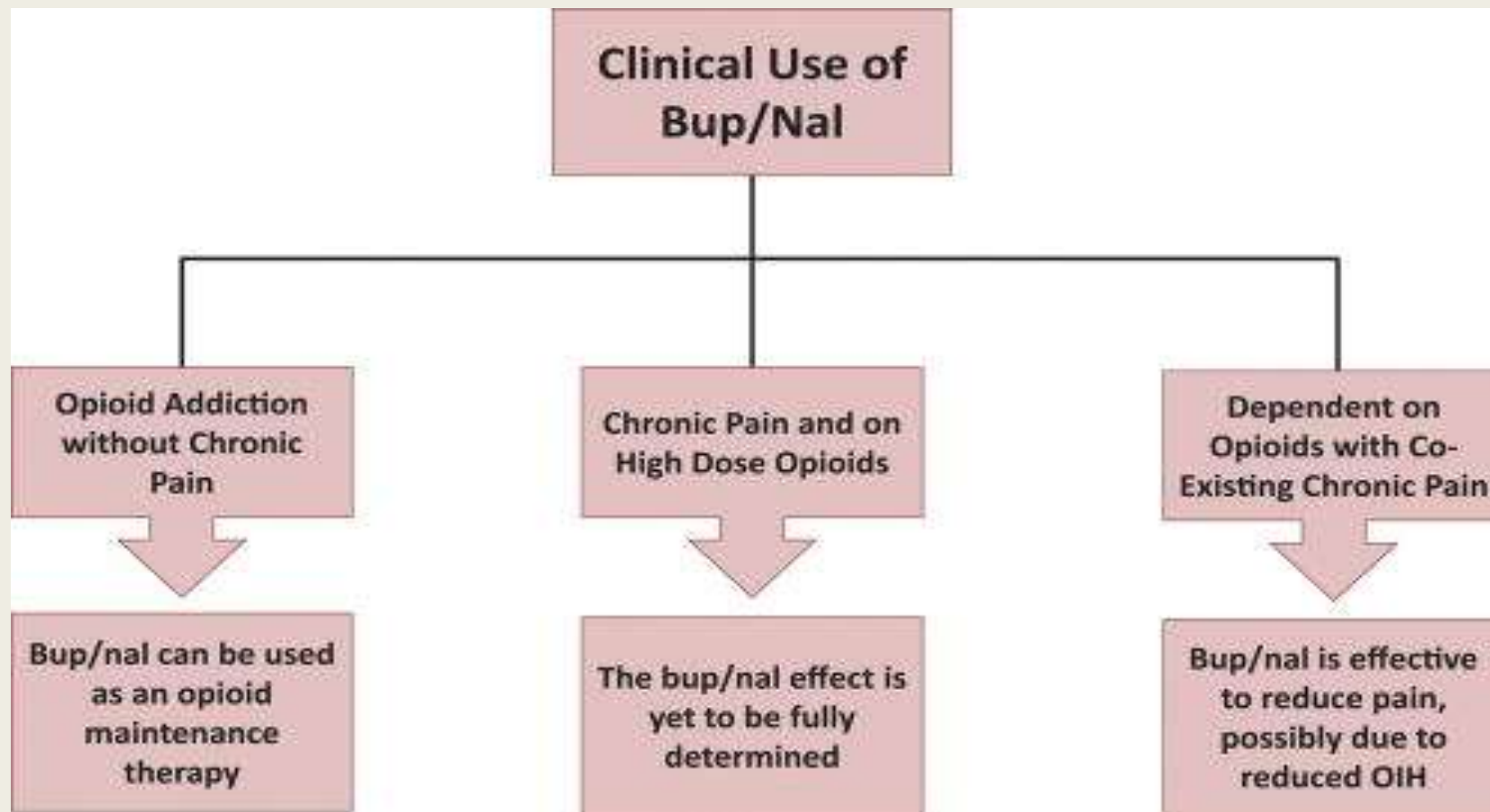
# Evidence

- Why
  - *Safety*
    - Not so much when sedatives on board
- Routes
  - *IV, sl, IM, TD*
  - *Buprenorphine (Suboxone®), buprenorphine-naloxone (Subutex®), buprenorphine (Butrans®)*
- When
  - *Opioid naïve vs dependent*
    - “Conversion”
    - Precipitating w/d
  - *Acute pain*
    - Traumatic or perioperative
    - With or against

# Evidence

Reference	Drug Dose and Study Duration	Type of Study	Treatment Regimen	Clinical Outcome	Comments
Fudala <i>et al.</i> <sup>25</sup> 2003	16 mg bup/nal daily for 4 wk	Randomized, double-blind clinical trial (n = 326) comparing bup/nal to buprenorphine and placebo	All subjects received HIV counseling and had up to 1 h of individualized counseling per week	Bup/nal or buprenorphine subjects showed reduced opioid use and craving for opioids during the study; a greater percentage of urine samples were negative for opioids in the bup/nal (17.8%) or buprenorphine (20.7%) group	<b>Strength:</b> This was a premier study addressing the effectiveness of bup/nal in an office-based setting <b>Limitation:</b> The trial ended early due to the overwhelmingly positive response to buprenorphine and bup/nal therapy
Barry <i>et al.</i> <sup>28</sup> 2007	Bup/nal therapy for 12 wk	Randomized, clinical trial (n = 142) comparing three treatment conditions, varying in counseling intensity (20 vs. 45 min) and medication dispensing (once weekly vs. three times weekly)	Bup/nal treatment with counseling with physician or nurse	Subjects were satisfied with primary care office-based bup/nal therapy; with an overall score of 4.4 of 5	<b>Strength:</b> The patient satisfaction questionnaire contained 19 questions, allowing for a wide range of response <b>Limitation:</b> A lot of study questions involved patient-healthcare provider interactions with a low external validity
Mintzer <i>et al.</i> <sup>26</sup> 2007	Individualized dose, ranging from 8 to 24 mg bup/nal daily	Prospective, observational cohort study (n = 99)	Bup/nal treatment; subjects also attended alcoholics anonymous, narcotics anonymous, and/or counseling services	In total, 54% of subjects were sober at 6 mo. Opioid-addicted subjects were safely and effectively treated in a primary care setting with limited resources	<b>Strength:</b> The study was conducted in an urban environment with proper randomization of study subjects <b>Limitation:</b> Lack of an untreated control group
Fiellin <i>et al.</i> <sup>29</sup> 2008	Individualized dose, ranging from 16 to 24 mg bup/nal daily for at least 2 yr	Prospective observational study (n = 53)	Bup/nal treatment with monthly counseling with a physician; patients with illicit drug use were provided with enhanced treatment for addiction services	High subject satisfaction (86 of 95); 91% of the monthly urine specimen collected were negative for opioid. There was a moderate level of retention in primary care office-based treatment for addiction	<b>Strength:</b> The study followed patients up to 5 yr <b>Limitation:</b> A large number of patients, approximately 50%, had left treatment after 1 yr and they were not included in follow-up
Rapeli <i>et al.</i> <sup>30</sup> 2007	Mean daily bup/nal dose of 15.8 mg for 6 wk	Randomized clinical trial (n = 50) comparing bup/nal to methadone and placebo	Cognitive, attention, and memory tests were conducted	Bup/nal was more effective than methadone in the preservation of cognitive function within the 6 wk of the study	<b>Strength:</b> Included cognitive testing and two of three cognitive tests used a computer test, reducing the possibility of researcher bias <b>Limitation:</b> Cognitive tests were not fully validated
Kamien <i>et al.</i> <sup>32</sup> 2008	8 or 16 mg bup/nal daily for 17 wk	Randomized, double-blind clinical trial (n = 268) comparing bup/nal to methadone in varying dose strength	Subjects received 1 h of individualized counseling with a therapist. Subjects were allowed to continue illicit drugs	Bup/nal was just as effective as methadone in producing positive outcomes (10% of 8 mg bup/nal, 17% of 16 mg bup/nal, 12% of 45 mg methadone, and 1% of 90 mg methadone had opioid negative urine samples for 12 consecutive urine samples. Urine sample were measured three times a week)	<b>Strengths:</b> The first clinical trial to compare the effectiveness between bup/nal and methadone as maintenance therapy; no take home therapy, reducing bias on the amount of drug taken; a double-blind and double-dummy design <b>Limitation:</b> Required participants to go to clinic every day to get medication, a possible confounding factor of study compliance
Parran <i>et al.</i> <sup>30</sup> 2010	Either 12 or 16 mg bup/nal daily for 18 mo	Retrospective chart review and cross sectional telephone interview (n = 176)	Full adherence was required. Those with substance abuse were referred back to the next highest level of care	Bup/nal was found to be a viable office-based opioid treatment option; 77% subjects were more likely to report abstinence, affiliated with 12-step recovery, be employed, and have improved functional status at the 18th month follow-up	<b>Strength:</b> The study explored the impact of socioeconomic status of patients on a bup/nal therapy <b>Limitation:</b> Patients had to follow through with every step of the bup/nal treatment or they would be discharged from the program
Schackman <i>et al.</i> <sup>27</sup> 2012	8 mg bup/nal daily for 2 yr	Prospective observational cohort study (n = 53)	Patients were allowed to continue on their illicit drugs	Bup/nal maintenance therapy had a cost-effective ratio of \$55,100/QALY and has 64% chance of being below the \$100,000/QALY threshold as compared with no treatment	<b>Strength:</b> Data were calculated from a cohort study and the quality of life weights were obtained from a clinical trial questionnaire <b>Limitation:</b> Did not consider the impact of bup/nal on other health services (e.g. mental health services, decrease in criminal behaviors, etc.)
Neumann <i>et al.</i> <sup>33</sup> 2013	Individualized dose ranging from 4 to 16 mg bup/nal daily (mean: 14.9 mg) for 6 mo	Randomized open-label clinical trial (n = 54) comparing bup/nal to methadone	Subjects stopped self-administering opioid medications and illicit drugs and drinking alcohol. Nonopioid analgesics were allowed; and patients were encouraged to attend self-help programs	26 (48.1%) subjects noted a 12.8% reduction in pain score under bup/nal or methadone at the 6-mo follow-up. No subjects in the methadone group, as compared with five in the bup/nal group reported illicit opioid use at the 6-mo follow-up	<b>Strength:</b> Approximately 50% of participants completed the study <b>Limitation:</b> An open-label design

Bup/nal = buprenorphine-naloxone; HIV = human immunodeficiency virus; QALY = Quality-Adjusted Life Years.





# X + Y = Analgesia

- X = amount of opioids per day to avoid withdrawal
  - *Confirmed OAT/MAT dose*
  - *Confirmed chronic regimen*
    - WVBOP CSMP
  - *Starts to get difficult when things move underground*
    - 10 “stamp” bag heroin = ? morphine equivalents
    - X = 0 by way of dishonesty
      - *“I don’t use or take anything”*
    - X = minimized
      - *“I don’t use or take that much”*
        - Common in pregnant patients
    - Opioid withdrawal hurts!

# X + Y = Analgesia

- Y = an attempt to quantify acute pain
  - *Consult the expert*
    - How much pain did the procedure cause
      - *What does it normally cause?*
      - *Complications?*
      - *How would it be managed in opioid naïve patient?*
        - What medication, route and for how long?

# X + Y = Analgesia

- Still consulted on regularly and see situations where we have yet to define X
  - *Patient still is in opioid withdrawal*
    - Not comfortable with amounts
    - Inaccurate information
- Titrate carefully until withdrawal is gone

# Safeguards

- Do not underestimate the power of addiction
  - *Will not stop using just because sick or in hospital*
    - Using before OR
- Treating versus Policing
  - *Balancing risks and benefits and resources*
- Set up protocols
  - *Universal precautions*

# Safeguards

- Treatment works
- MAT is evidence based approach
  - *MTD, bup, bup/nlx*
- Connecting with treatment remains difficult due to access issues
- Recent steps to improve
  - *Access*
  - *Quality*

# Safeguards

- Drug screens
- Searching rooms and belongings
- Being aware of visitors
- Safety precautions
  - *“suicide watch” versus video monitoring*
- Nursing education
  - *Pills in cup*
- PCA

# Safeguards

- If on OAT/MAT or chronic pain regimen, confirm dose
  - *Provider, pill bottle, pharmacy, CSMP*
    - Don't rush to start methadone
- Urine Drug Screen
  - *Know what to look for*
  - *Know to confirm*

# OAT/MAT with bup or bup/nalx

- Double edge sword
- Blocker good when used as addition medication
- Can be bad when attempting to manage pain
- With it or against it



# OAT/MAT with bup or bup/nalx

- With it
- Confirm dose
  - *Defer to how pt takes it at home unless red flags*
  - *Divide if possible as  $t_{1/2}$  different for analgesia*
- “Top off”
  - Add additional 1-2 mg doses to maintenance for break through or acute pain
    - Similar to other acute regimens
- Ceiling effect
  - Diminishing returns as you approach 32 mg
- Don't combine other agonist opioids

# OAT/MAT with bup or bup/nalx

- Against it
  - *Override*
- Stop medication
- Initially fighting medication as it leaves system
- Eventually replacing X once it clears
- Either way you look at it, alarming dosages
- bup or bup/nalx is potent
- We typically will utilize fentanyl PCA with success
- Transition back at some point

# Take homes

- $X + Y = \text{analgesia}$

# Take home

- Pain is challenging to treat alone
- Add depression, anxiety or addiction to the mix and challenge increases
  - *These can be treated if identified*
  - *Don't miss opportunities to treat or refer*
- Do not underestimate addiction
  - *Doesn't go away if sick or pregnant*

# References

- American Academy of Pain Medicine. (2013). Use of Opioids for the Treatment of Chronic Pain. Retrieved from: <http://www.painmed.org/files/use-of-opioids-for-the-treatment-of-chronic-pain.pdf>
- American Pain Society. (2008). *Principles of analgesic use in the treatment of acute pain and cancer pain*. 6<sup>th</sup> ed. Skokie, IL: American Pain Society.
- Arnstein, P. (2010). *Clinical coach for effective pain management*. Philadelphia, Pennsylvania: F.A. Davis Company. Centers for Disease Control and Prevention. (2014). Opioid Painkiller Prescribing. Retrieved from <http://www.cdc.gov/vitalsigns/opioid-prescribing/index.html>.
- Chen K.Y., Chen, L., Mao, J. (2014). Buprenorphine-naloxone therapy in pain management. *Anesthesiology*, 120 (5): 1262-74.
- Davis, M. (2014). Buprenorphine. [PowerPoint slides]. *Cleveland Clinic*.
- Gordon, A. J., Sullivan, M.A. (2013, November 29). The off-label use of sublingual buprenorphine and buprenorphine/ naloxone for pain. *Providers Clinical Support System Guidance*. Retrieved from: <http://pcssmat.org/wp-site/wp-content/uploads/2014/02/PCSS-MATGuidanceOff-label-bup-for-pain.Gordon.pdf>.
- Heit, H.A., Gourlay, D.L. (2008). Buprenorphine: new tricks with an old molecule for pain management. *Clin J Pain*, 24 (2): 93-97.
- Pasero, C., McCaffery, M. (2011). *Pain assessment and pharmacological management*. St. Louis, Missouri: Mosby Elsevier.
- National Institute of Drug Abuse. (2011). Prescription Drug Abuse: Chronic Pain Treatment and Addiction. Retrieved from <http://www.drugabuse.gov/publications/research-reports/prescription-drugs/chronic-pain-treatment-addiction>
- Sausser, L. "CDC tracks high rates of painkiller prescriptions in southern states." *The Post and Courier* [South Caroline] 4 July 2014. *Post and Courier* Web. 21 July 2014. Retrieved from <http://www.postandcourier.com/article/20140704/PC1610/140709703/1177/cdc-tracks-high-rates-of-painkiller-prescriptions-in-southern-states>.
- Substance Abuse and Mental Health Services Administration. (2011). *Managing chronic pain in adults with or in recovery from substance use disorders*. Treatment Improvement Protocol (TIP) Series 54. HHS Publication No. (SMA) 12-4671. Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Sullivan, R. Chronic Pain Management and Addiction. [PowerPoint slides]. *West Virginia University*.
- West Virginia Department of Behavioral Medicine & Psychiatry. (2014). "Telehealth →Telepsychiatry→ Tele-addiction medicine" [Powerpoint Slides].

# Objectives

- Understand what can complicate pain management in this population
- Identify patients with opioid use disorders
- Discuss common presentations
- Learn techniques for safe and effective pain management for opioid dependent patients
- Demonstrate effectiveness of MAT

Questions?

Thanks!