

Case Discussions in the Management of Opioid Use Disorder

April 4, 2019 Rural & Remote Conference, SRPC

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1

**Conflict of Interest
Declaration: Nothing to
Disclose**

Presenter: Anne Robinson

Title of Presentation:
Case Discussions in the Management of Opioid
Use Disorder

**I have no financial or personal relationships to
disclose**

2

Learning Objectives

- Describe a therapeutic approach to the patient with persistent positive urine drug screens.
- Discuss diversion behaviour with a patient.
- Outline key considerations for management of opioid use disorder in pregnancy.
- List some options for managing acute pain in patients who are taking buprenorphine/naloxone.

3

Mark, age 28

Mark has been on bup/nlx 16mg for three months. He has continued to have positive UDS at most of his weekly tests (THC, cocaine, oxycodone). He has fresh track marks at his left antecubital fossa on today's visit. You have had repeated discussions with him about the harms of ongoing IVDU and you are feeling frustrated that the bup/nlx treatment just does not seem to be working.

4

Angela, age 34

Angela has been on bup/nlx 10mg for eight months. Her last positive UDS was six months ago. You have just received a note from the pharmacist that Angela was caught attempting to divert her bup/nlx dose today.

5

Charlotte, age 30

Charlotte has come requesting a pregnancy test because her LMP was sometime in February (or maybe January? She can't remember...). You do a urine test in your office and it is positive.

Charlotte is now tearful and confesses to you that she has been injecting morphine and methadone for the past several months, and now she wants help to stop because she does not want to be using while she is pregnant.

6

Tom, age 38

You are working in the ER and Tom is brought by in by his wife after he fell off a ladder. He has an obvious dislocated R shoulder, and you suspect he may have some fractured ribs as well. He is in a great deal of pain.

He takes bup/nlx 20mg OD, and has been on this dose for at least 4 months. He was started on bup/nlx 24mg about 8 months ago, and is slowly decreasing his dose.

You recall that bup/nlx blocks other opioids, so you are wondering how best to manage his pain.

7

Other cases?

8

Buprenorphine/Naloxone Key Points and Handy Reference Materials

Anne Robinson MD CCFP (AM) at SRPC Conference April 2019
(highly recommend additional education such as CAMH courses)

<i>DSM V Criteria for OUD: At least 2 of these symptoms within the past 12 months.</i>		
1. Opioids often taken in larger amounts or over longer period of time than intended.		
2. Persistent desire or unsuccessful efforts to cut down or control opioid use.		
3. Great deal of time spent in activities necessary to obtain opioid, use the opioid, or recover from its effects.		
4. Craving or strong desire to use opioids.		
5. Failure to fulfill major role obligations at work, school, or home.		
6. Continued opioid use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of opioids.		
7. Important social, occupational, or recreational activities are given up or reduced because of opioid use.		
8. Recurrent opioid use in situations in which it is physically hazardous.		
9. Continued use despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by opioids.		
10. Tolerance,* as defined by either of the following:		
a) Need for markedly increased amounts of opioids to achieve intoxication or desired effect.		
b) Markedly diminished effect with continued use of the same amount of opioid		
11. Withdrawal,* as manifested by either of the following:		
a) Characteristic opioid withdrawal syndrome.		
b) Same (or a closely related) substance is taken to relieve or avoid withdrawal symptoms.		
* These criterion (items 10 & 11) are not considered to be met for those taking opioids solely under appropriate medical supervision.		
Mild: 2 – 3 symptoms	Moderate: 4 – 5 symptoms	Severe: 6 or more symptoms

“Where There is no Pharmacist” approaches to providing DOT
The Narcotic Control Act allows for a 3 rd party to act as an agent of either the prescribing physician or the patient receiving treatment.
Key elements of training should include: <ul style="list-style-type: none"> • Confidentiality requirements ^[1]_[SEP] • Documentation requirements ^[1]_[SEP] • Reporting requirements ^[1]_[SEP] • Exact procedures for observing patients during dosing ^[1]_[SEP] • How to manage a suspected diversion attempt ^[1]_[SEP] • Exact procedures for tracking medication ^[1]_[SEP](pill counting)

URINE DRUG TESTING

Punitive approach is not recommended (ie. do not stop therapy based on positive UDT).
Patient-centered approach allows for non-judgemental discussion of ongoing illicit drug use, relapses, and goals of harm reduction.

Type of Test	Point of Care	Lab Immunoassay	Broad Spectrum
Method	Enzyme Immunoassay	Enzyme Immunoassay	Chromatography +/- mass spectrometry
Advantages	Immediate results	Detects several classes of drugs Timely results (hrs)	Detects specific drug and/or metabolite Identifies drugs not detected by immunoassay Higher sens & spec
Disadvantages	Limited number of drugs detected High FP and FN rate	Only identifies class FN and FP for certain drugs	Takes much longer (days to weeks) Need knowledge of metabolites

RECOMMENDED RESOURCES

- McMaster PBSG Module (UDT – Interpreting Results, Feb 2017)
- LifeLabs® 2016. http://tests.lifelabs.com/Laboratory_Test_Information/Search.aspx enter Ontario, then “Drugs of abuse screen (urine)”; then click on “Forms”
- DynaCare® Labs 2016. <https://www.dynacare.ca/healthcare-providers-and-hospitals/continuing-medical-education/interpretation-guides.aspx>
- Rx Files: Q&A Summary. Urine Drug Screening (UDS). 2011. <http://www.rxfiles.ca/rxfiles/uploads/documents/urine-drug-screening-uds-qanda.pdf>

STANDARD BUP/NLX INDUCTION PROTOCOL

Patient must be in at least mild w/d prior to initiating and/or abstinent of full agonist opioid for at least 12 hrs (IVDU), 24 hrs (other routes), or 3-5 days if methadone use.

Day	Morning	Afternoon	Max Dose
1	Starting dose of up to 4mg	If in W/D, give up to 4mg as “top up”	8mg (usual) 12mg (in special circumstances)
2	No W/D? Give total Day 1 dose.	If in W/D, give up to 4mg as “top up” (Day 2 afternoon assessment is often not necessary)	16mg
	W/D present? Give total Day 1 dose plus up to additional 4mg		
3	No W/D? Give total Day 2 dose		20mg
	W/D present? Give total Day 2 dose plus up to additional 4mg		
4	No W/D? Give total Day 3 dose		24mg
	W/D present? Give total Day 3 dose plus up to additional 4mg		

MISSED DOSES (give restart dose, then re-titrate as per induction protocol)		
Buprenorphine Dose	Number of Consecutive Days Missed	New Starting Dose
> 8mg	> 7 days	4mg
> 8mg	6 – 7 days	8mg
6 – 8 mg	> 5 days	4mg
adapted from Handford et al 2012		

BUPRENORPHINE	METHADONE
Partial <i>mu</i> agonist <ul style="list-style-type: none"> • LOWER risk of death if OD • Ceiling effect • May not be adequate for users of very large amounts of opioids 	Full <i>mu</i> agonist <ul style="list-style-type: none"> • HIGHER risk of death if OD • No dose limit
25 -40 x the oral morphine equivalent	No applicable oral morphine equivalence
LONG ½ life (36 – 48 hrs) <ul style="list-style-type: none"> • Daily or alternate day dosing 	LONG ½ life (24 – 36 hrs) <ul style="list-style-type: none"> • Daily dosing
VERY HIGH affinity for <i>mu</i> receptor <ul style="list-style-type: none"> • Blocks other opioids • Less reward of illicit opioid use • Difficult to manage acute pain 	AVERAGE affinity for <i>mu</i> receptor <ul style="list-style-type: none"> • Can add other opioids
Can cause Precipitated Withdrawal <ul style="list-style-type: none"> • Due to high <i>mu</i> affinity combined with partial <i>mu</i> activation • Patient needs to be in w/d prior to induction 	Does not cause Precipitated Withdrawal BUT, higher risk of death during induction
<i>kappa</i> antagonist <ul style="list-style-type: none"> • Less dysphoria 	<i>kappa</i> agonist <ul style="list-style-type: none"> • Dysphoria side effects
Very few drug interactions	Numerous drug interactions
Little/no QT prolongation	QT prolongation
More difficult DOT	Simple DOT
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CLINICAL OPIATE WITHDRAWAL SCALE (COWS)

For each item, circle the number that best describes the patient's signs or symptom. Rate on just the apparent relationship to opiate withdrawal. For example, if heart rate is increased because the patient was jogging just prior to assessment, the increase pulse rate would not add to the score.

<p>Resting Pulse Rate: _____ beats/minute <i>Measured after patient is sitting or lying for one minute</i></p> <p>0 pulse rate 80 or below 1 pulse rate 81-100 2 pulse rate 101-120 4 pulse rate greater than 120</p>	<p>GI Upset: <i>over last 1/2 hour</i></p> <p>0 no GI symptoms 1 stomach cramps 2 nausea or loose stool 3 vomiting or diarrhea 5 Multiple episodes of diarrhea or vomiting</p>				
<p>Sweating: <i>over past 1/2 hour not accounted for by room temperature or patient activity.</i></p> <p>0 no report of chills or flushing 1 subjective report of chills or flushing 2 flushed or observable moistness on face 3 beads of sweat on brow or face 4 sweat streaming off face</p>	<p>Tremor <i>observation of outstretched hands</i></p> <p>0 No tremor 1 tremor can be felt, but not observed 2 slight tremor observable 4 gross tremor or muscle twitching</p>				
<p>Restlessness <i>Observation during assessment</i></p> <p>0 able to sit still 1 reports difficulty sitting still, but is able to do so 3 frequent shifting or extraneous movements of legs/arms 5 Unable to sit still for more than a few seconds</p>	<p>Yawning <i>Observation during assessment</i></p> <p>0 no yawning 1 yawning once or twice during assessment 2 yawning three or more times during assessment 4 yawning several times/minute</p>				
<p>Pupil size</p> <p>0 pupils pinned or normal size for room light 1 pupils possibly larger than normal for room light 2 pupils moderately dilated 5 pupils so dilated that only the rim of the iris is visible</p>	<p>Anxiety or Irritability</p> <p>0 none 1 patient reports increasing irritability or anxiousness 2 patient obviously irritable anxious 4 patient so irritable or anxious that participation in the assessment is difficult</p>				
<p>Bone or Joint aches <i>If patient was having pain previously, only the additional component attributed to opiates withdrawal is scored</i></p> <p>0 not present 1 mild diffuse discomfort 2 patient reports severe diffuse aching of joints/ muscles 4 patient is rubbing joints or muscles and is unable to sit still because of discomfort</p>	<p>Gooseflesh skin</p> <p>0 skin is smooth 3 piloerection of skin can be felt or hairs standing up on arms 5 prominent piloerection</p>				
<p>Runny nose or tearing <i>Not accounted for by cold symptoms or allergies</i></p> <p>0 not present 1 nasal stuffiness or unusually moist eyes 2 nose running or tearing 4 nose constantly running or tears streaming down cheeks</p>	<p>Total Score _____</p> <p style="text-align: center;">The total score is the sum of all 11 items</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Mild: 5-12</td> <td style="width: 50%;">Moderately Severe: 25-36</td> </tr> <tr> <td>Moderate: 13-24</td> <td>Severe: more than 36</td> </tr> </table>	Mild: 5-12	Moderately Severe: 25-36	Moderate: 13-24	Severe: more than 36
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From: Wesson DR, LingW J Psychoactive Drugs 2003 Apr-June: 35(2):253-9