

Pain Management in Primary Care

Part Two

Joshua D. Dion MSN, APRN-BC, ACNP

Prescribers of Opioids

- Know how to start, modify, and discontinue opioids.
- Know how to convert from SA to LA or change from on SA to another SA or a LA to another LA.
- Understand that equal analgesic tables are a guide and are not 100% correct. Take into account incomplete cross-tolerance.

Commonly Used SA Opioids

Drug	Dosing Strengths mg	Dosing Frequency	Maximum Daily Dose
Oxycodone	5,10,15,20,30	5 to 30 mg q4 prn	Not defined
Oxycodone/ Acetaminophen	2.5,5,7.5,10 325 to 650	2.5 to 10 mg q4 to 6 prn	4 grams Acet. In 24 hr.
Aspirin	4.8/ 325	q6 prn	12 per 24 hr.
Ibuprofen	5/400	qd to qid prn	4 per 24 hr.
Hydrocodone/ Acetaminophen	2.5,5,7.5,10 300 to 700 mg	2.5 to 10 mg q4 to 6 prn	4 grams Acet. in 24 hr.
Ibuprofen	200	q4 to 6 h prn	Max 5 qd
Hydromorphone	2,4,8	2-8 mg q3 to 4 prn	Not defined
Morphine IR	15,30	10-30 mg q3 to 4 prn	Not defined
Nucynta	50,75,100	50 to 100 mg q4 to 6 prn	Not defined

Long-Acting Opioids Currently Available

Drug	Dosing Interval	Available Strengths	Administration	Bolus	Ceiling dose
KADIAN®	q12hr q24hr	20, 30, 50, 60, 100 mg	Capsule, Sprinkle, G-Tube	No	-
AVINZA®	q24hr	30, 60, 90, 120 mg	Capsule, Sprinkle	Yes	1600 mg/day
OxyContin®	q12hr	10, 20, 40, 80, 160 mg	Tablet	Yes	-
MS Contin®	q8hr q12hr	15, 30, 60, 100, 200 mg	Tablet	No	-
Duragesic®	q48 hr q72hr	12, 25, 50, 75, 100 mcg/hr	Transdermal Patch	No	-

Long-Acting Opioids (continued)

Opana ER®	Q 12hr	5, 10, 20, 40	Tablet	No	-
Exalgo ®	Q 24 hr	8,12,16 mg	Tablet	No	-
Butrans®	Q week	5, 10, 20 mcg/hr	Transdermal Patch	No	-
Nucynta ER®	Q 12 hr	50,100,150, 200, 250	Tablet	No	-

Products to avoid (or use cautiously)

- **DO NOT USE PLACEBOS**
- **Avoid**
 - Demerol
- **Use Cautiously**
 - Codeine
 - Tramadol
 - Agonist/antagonist drugs
 - Methadone

Risk Evaluation and Mitigation Strategies.

- FDA amendments act of 2007 allowed the FDA to initiate requirements to minimize the risks of certain medications.
- REMS can be mandated for any medication class and certain opioids have been included.
- Participation in REMS is currently Voluntary
- REMS Online CME Course available through Boston University: WWW.SCOPEOFPAIN.COM

Risk Evaluation and Mitigation Strategy (REMS)

Pros

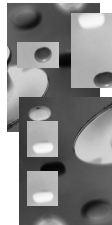
- Address the potential problems associated with prescribing opioids (physicians, NP's, and PA's).
- Education on proper patient selection and tools for patient education.
- Paid for by Pharmaceutical manufacturers.

Cons

- Could limit access for patients.
- Time requirements for providers to train on each drug are not known.
- Limited to Long acting opioids only.

Polypharmacy

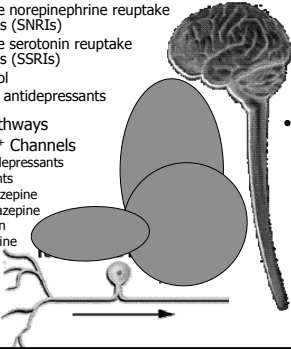
- For predictable/steady pain
 - Provide estimated need in LA meds
 - Have 10-25% of daily dose for breakthrough pain episodes
- One drug per class (exc. LA / SR MS)
- Different metabolism / excretion
- Different toxicity / Side effect profile
- Better than irrational polypharmacia



Co-Analgesics

- Descending Inhibitory Pathways
 - Opioids
 - Selective norepinephrine reuptake inhibitors (SNRIs)
 - Selective serotonin reuptake inhibitors (SSRIs)
 - Tramadol
 - Tricyclic antidepressants

- Peripheral Pathways
- Voltage D. Na⁺ Channels
 - Tricyclic antidepressants
- Anticonvulsants
 - Carbamazepine
 - Oxycarbazepine
 - Phenytoin
 - Lamotrigine
- Lidocaine
- Mexiletine



- Spinal Pathways
 - N-type Ca²⁺ Channels
 - Gabapentin
 - Lamotrigine
 - Levetiracetam
 - Oxycarbazepine
 - Carbamazepine
 - Pregabalin
 - NMDA receptors
 - Dextromethorphan
 - Ketamine
 - Methadone

Questions on Pharmacology?

Screening of Pain Management Referrals

- Require referral from current treating provider, regardless of insurance plan.
- Require 3 to 6 months of office notes and all pertinent diagnostics pertaining to the condition.
- Require all notes from specialists and/or previous pain care providers.
- Use caution accepting self pay patients.

Risk Assessment for Opioid Use

- Pros
 - Protects the patient, the public, and your practice.
 - Helps determine most appropriate treatment protocol.
 - Compliance monitoring (frequency of pill counts and UDS)
- Cons
 - Difficult to find a provider to screen patients.
 - Assessments can be open to interpretation.
 - Cost can be prohibitive for patients if not covered on insurance plan.
 - How to chose which patients need to be screened.

In Office Assessment of Addiction

- Tools available:
- ORT (Opioid Risk Tool)
http://www.partnersagainstpain.com/printouts/Opioid_Risk_Tool.pdf
- SOAPP (Screener and Opioid Assessment for Patients in Pain)
<http://www.painedu.org/soap.asp>
- COMM (Current Opioid Misuse Measure)
<http://www.painedu.org/soap.asp>

High Risk: Likelihood of Misusing Opioid Medications.

- May chose to use only non-opioid medications and alternate treatment modalities.
- If prescribing of opioids is initiated, use longer acting products, smaller quantities, frequent visits, more frequent UDS, and random pill counts.
- Re-screen if any signs of aberrant behaviors.
- Consider NA and/or AA services if needed.
- Role of Methadone /Suboxone Clinics for detoxification.

Low Risk: Unlikely to misuse opioid medications.

- Set clear expectations for treatment with opioids and sign treatment agreement.
- UDS on day of first RX to ensure compliance with current and/or reported medication regimen and to ensure no other illicit or prescribed drugs are present.
- Perform random UDS and pill counts.

Pain Treatment Agreements

- | Positives | Negatives |
|-------------------------|---|
| -Clear expectations | -Patient Perceptions about agreements |
| -Informed Consent | -Open to interpretation. |
| -Documentation | -Time and staff power needed to keep agreements up to date. |
| -Patient safety | |
| -Safe Guarding Practice | |

PAIN TREATMENT AGREEMENT

Patient Name: _____ Date: _____
 Opioid (narcotic) treatment for chronic pain is used to reduce pain and improve what you are able to do each day. Along with opioid treatment, other medical care may be prescribed to help improve your ability to perform daily activities. This may include exercise, use of non-narcotic analgesics, physical therapy, psychological counseling, or other therapies and treatments. Vocational counseling may also be provided to assist in your return to work effort. The success of treatment depends on mutual trust and honesty in the provider/patient relationship and full agreement and understanding of the risks and benefits of using opioids to treat pain.

I, _____, understand that compliance with the following guidelines is important in continuing pain treatment with Integrated Pain Care.

1. I understand that I have the following responsibilities:
 - a. I will take medications only at the dose and frequency prescribed.
 - b. I will not increase or change medications without the approval of this provider.
 - c. I will actively participate in Return to Work efforts and in any program designed to improve function (including social, physical, psychological and daily or work activities).
 - d. I will not request, obtain opioids or any controlled medications or any other pain medicine from friends, family, emergency departments or healthcare providers. This provider will approve or prescribe all pain medications.
 - e. I will inform this provider of all other medications that I am taking, since opioid medications can interact with over-the-counter medications and other prescribed medications (particularly cough syrup that contains alcohol, codeine, or Hydrocodone). I will notify my provider of any changes made to my medication regimen.
 - f. I will obtain all medication from one pharmacy, when possible, known to this provider with full consent to talk with the pharmacist given by signing this agreement.
 - g. I will protect my prescriptions and medications from loss or theft by keeping them in a safe and secure place. I will keep all medications from children. No lost prescriptions or stolen prescriptions and/or medications will be replaced. Stolen medications should be reported to the police and to your provider immediately.
 - h. I will obtain all prescriptions for my medications during an office visit during a scheduled office visit every 28-30 days unless otherwise specified by my provider. No refills of any medications will be given during the evening or on weekends through the paging system.
 - i. At anytime and without notice, I may be required to return any unused opioid medications prescribed by my provider in the original bottles and provide a urine sample if called in to do so within a 4 hour period.
 - j. I agree to participate in psychiatric or psychological assessments, if necessary.
 - k. I will not use illegal or street drugs or alcohol. If I have an addiction problem, this provider may ask me to follow through with a program to address this issue. Such programs may include the following:
 - * 12 step program and securing a sponsor
 - * Individual counseling
 - * Inpatient or outpatient treatment
 - l. I will not destroy or dispose of any discontinued or currently prescribed medications written by an Integrated Pain Care Provider unless specifically instructed to do so.

2. I understand that in the event of an emergency, this provider should be contacted and the problem will be discussed with the emergency room or other treating provider. I am responsible for signing a consent to request record transfer to this provider.

3. I understand that I will consent to random drug screening. Urine drug testing is not forensic testing, but is done for your benefit as a diagnostic tool. The presence of a non-prescribed drug(s) or illicit drug(s) or the absence of drugs prescribed by your provider can be grounds for termination of the provider/patient relationship.

4. I will keep my scheduled appointments and/or cancel my appointment a minimum of **at least 24 hours prior to the appointment.**

5. I understand that this provider may stop prescribing opioids, change the treatment plan, or terminate the patient/provider relationship if:
- I do not show any improvement in pain from opioids or my physical activity has not improved.
 - My behavior is inconsistent with the responsibilities outlined in #1 above.
 - I give, sell or misuse the opioid medications.
 - I develop rapid tolerance or loss of effect.
 - I obtain opioids from someone other than this provider.
 - I refuse to cooperate when asked to get a drug screen or a pill count.
 - If an addiction problem is identified as a result of prescribed treatment or any other addictive substance.
 - I am unable to keep follow-up appointments with Integrated Pain Care and other facilities as outlined in my individual treatment plan.
 - I test positive for any illicit substance, which includes but is not limited to cocaine, PCP, LSD, marijuana, ecstasy, methamphetamine, and heroin.
 - If I stop my medication without instruction to do so from my provider and/or I fail to inform my provider of any side effects or adverse reactions to any of my medications.

YOUR SAFETY REQUIRES WORKING UNDER THE INFLUENCE OF OPIOIDS
You should be aware of potential side effects of opioids such as decreased reaction time, clouded judgment, drowsiness and tolerance. Also, you should know about the possible dangers associated with the use of opioids while operating heavy equipment or driving. Integrated Pain Care does not advise driving while taking opioid medications and/or other medications prescribed for your pain that may impair your driving abilities.

SIDE EFFECTS OF OPIOIDS:

- Confusion or other change in thinking abilities
- Problems with coordination or balance that may make it unsafe to operate dangerous equipment or motor vehicles
- Breathing too slowly – overdose can stop your breathing and lead to death
- Nausea
- Constipation
- Sleepiness or drowsiness
- Aggravation of depression
- Vomiting
- Dry Mouth

These side effects may be made worse if you mix opioids with other drugs, including alcohol.

RISKS:

- 1. Physical dependence** means that if the opioid medication is abruptly stopped or not taken as directed, a withdrawal symptom can occur. This is a normal physiological response. The withdrawal syndrome could include, but are not limited to, sweating, nervousness, abdominal cramps, diarrhea, goose bumps, and alterations in one's mood. It should be noted that physical dependence does not equal addiction. One can be dependent on insulin to treat diabetes or dependent on prednisone (steroids) to treat asthma, but one is not addicted to the insulin or prednisone.
- 2. Tolerance** means a state of adaptation in which exposure to the drug induces changes that result in decreased effectiveness of one or more of the drug's effects over time. The dose of the opioid may have to be adjusted up or down to a dose that produces maximum function and a resultant decrease of the patient's pain.
- 3. Addiction** is a primary, chronic neurobiologic disease with genetic, psychosocial and environmental factors influencing its development and manifestation. It is characterized by behavior that includes one or more of the following: impaired control over drug use, compulsive use, continued use despite harm, and cravings. This means the drug decreases one's quality of life.
- 4. Problems with pregnancy:** if you are pregnant or contemplating pregnancy, discuss this with your provider.

I will inform my provider if I become pregnant while under their care.

I have read this document, understand and have had all my questions answered satisfactorily. I consent to the use of opioids to help control my pain and I understand that my treatment with opioids will be carried out as described above.

Patient Signature _____ Date _____

Provider Signature _____ Date _____

Witness Signature _____ Date _____

Pharmacy _____ Phone _____

The purpose of this agreement is for me, _____, to understand and agree with my pain care provider on the following:

The pain management program at Integrated Pain Care is designed to help me learn to cope with my pain. The goals include changing those actions and attitudes that are associated with the pain, and learning to manage my life and work in ways that will be more productive and satisfying.

An overall goal is to gain control of my pain problem so that I can do more things that are considered normal for a person of my age. Specifically, I have the following goals:

1. _____
2. _____
3. _____
4. _____

I recognize that members of my family and others significant to me are considered essential in helping me to break old habits and to learn new ways to live with the pain. As a result, I will actively encourage these individuals to participate in my program. I understand that you may, with my consent, speak with members of my family if that will improve the chances of my attaining my goals. I understand that I will be informed before other people are contacted.

I understand that I am expected to attend all scheduled sessions and to participate in all at-home activities. Pain is no excuse. I further understand that my absence for a total of **three days** will be grounds for dropping me from the program due to non-compliance.

I understand that my provider will outline a plan of care based on my own individual needs and I am expected to attend all scheduled visits in my treatment plan, including but not limited to:

- Physical/Occupational Therapy
- Nutrition
- Psychology
- Interventional Procedures
- Acupuncture/Bowenwork
- Diagnostic Imaging

I further understand that my absence for a total of **three scheduled sessions** of any aspect of my treatment plan will be grounds for dropping me from the program due to non-compliance.

_____. I will immediately inform the staff about all other medical appointments outside the program. I will immediately inform the staff about any change in use of medication obtained outside this program.

_____ On the basis of my treatment needs, I and members of the treatment team will decide what the follow-up of the program will be and how long follow up will continue. I understand that all costs of this program are paid for by my workers compensation insurer, conditional upon my continued eligibility for workers compensation benefits.

_____ I understand and agree to the above conditions, and I acknowledge that the Pain Management Program has now been explained to my satisfaction.

_____ _____
Patient Signature Date

_____ _____
Printed Name

_____ _____
Integrated Pain Care Provider Date

Compliance Monitoring

Positives	Negatives
<ul style="list-style-type: none"> ● Necessary to protect the patient, provider, and society. ● Monitors adherence to treatment protocol 	<ul style="list-style-type: none"> ● Cost ● Staffing ● Time ● Patient complaints

Laboratory Information

- Know the cut off levels for a given drug.
- Know which drugs are screened for on a standard panel and which need to be added.
- If using a commercial lab, ensure that pricing information is available for a given panel and add ons.
- Have a go to person to address problems or concerns.

Toxicology Report Examples

Laboratory Accession:		Donor's Name		
Containers): 01: Urine		Urine, Random	Test(s): 70195 DetectMed Panel, Expanded (Urine)	
Analyte Name	Result	Cut-off	Unit	Loc
AMPHETAMINES	Negative	500	ng/mL	
BARBITURATES	Negative	200	ng/mL	
BENZODIAZEPINES	Negative	75	ng/mL	
BUPRENORPHINE/METABOLITE	Negative	5	ng/mL	
CANNABINOIDS	Negative	25	ng/mL	
CARISOPRODOL/METABOLITE	Negative	2.5	ug/mL	
COCAINE/METABOLITES	POSITIVE	150	ng/mL	
Benzoylgonine	POSITIVE INCONSISTENT	30	ng/mL	
Benzoylgonine, Quant		32905		
FENTANYL	Negative	1.0	ng/mL	
METHADONE/METABOLITE	Negative	100	ng/mL	
OPiates	Negative	50	ng/mL	
OXYCODONE/METABOLITE	Negative INCONSISTENT	50	ng/mL	
PHENCYCLIDINE	Negative	25	ng/mL	
PROPOXYPHENEMETABOLITE	Negative	300	ng/mL	
ALCOHOLS	Negative	0.03	% (w/v)	
ACETAMINOPHEN	Negative	10	ug/mL	
CREATININE	Normal	5	mg/dL	
Creatinine, Quant		25.3	mg/dL	
pH	Negative	6.3		
GENERAL OXIDANTS	Negative		200	ug/mL
MEDICATIONS LISTED:	-----			
1)	Oxycotin			
2)	Percocet			

Urine Drug Test - Quick Reference

"Positive Consistent" drug (or metabolite) detected and IS included in list of medications

"Positive Inconsistent" drug (or metabolite) detected and IS NOT included in list of medications

"Negative Inconsistent" drug (or metabolite) NOT detected or below cutoff level and IS included in list of medications

Drug	Reason for Positive Consistent / Inconsistent	Detection Window
Benzoylgonine	Metabolite of Cocaine Metabolite of Chlordiazepoxide (Librium)	1-4 Days

Laboratory Accession:		Donor's Name:		
Containers: 01: Urine		Urine, Random	Test(s): 70195 DetectMed Panel, Expanded (Urine)	
Analyte Name	Result	Cut-off	Unit	Loc
AMPHETAMINES	Negative	500	ng/mL	
BARBITURATES	Negative	200	ng/mL	
BENZODIAZEPINES	Negative	75	ng/mL	
BUPRENORPHINE/METABOLITE	Negative	5	ng/mL	
CANNABINOIDS	Negative	20	ng/mL	
CARISOPRODOL/METABOLITE	Negative	100	ng/mL	
COCAINE/METABOLITES	Negative	150	ng/mL	
FENTANYL	POSITIVE	0.5	ng/mL	
Fentanyl, Quant	POSITIVE	CONSISTENT	46.7	ng/mL
Norfentanyl	POSITIVE	CONSISTENT	>100	ng/mL
Norfentanyl, Quant	POSITIVE	CONSISTENT	>100	ng/mL
METHADONE/METABOLITE	Negative	100	ng/mL	
OPiates	POSITIVE	50	ng/mL	
Hydromorphone	POSITIVE	CONSISTENT	10	ng/mL
Hydromorphone, Quant	POSITIVE	CONSISTENT	50	ng/mL
PROPOXYPHENE/METABOLITE	Negative	300	ng/mL	
TRAMADOL/METABOLITE	Negative	200	ng/mL	
ALCOHOLS	Negative	0.02	% (w/v)	
ACETAMINOPHEN	Negative	10	ug/mL	
CREATININE	Normal	5	mg/dL	
Creatinine, Quant	Normal	154.6	mg/dL	
pH	Normal			
GENERAL OXIDANTS	Negative		200	ug/mL
MEDICATIONS LISTED:	=====			
1)	Dilaudid			
2)	Duragesic			

Laboratory Accession:		Donor's Name:	
Urine Drug Test - Quick Reference			
"Positive Consistent"		drug (or metabolite) detected and IS included in list of medications	
"Positive Inconsistent"		drug (or metabolite) detected and IS NOT included in list of medications	
"Negative Inconsistent"		drug (or metabolite) NOT detected or below cutoff level and IS included in list of medications	
Fentanyl			
Drug	Reason for Positive Consistent / Inconsistent	Detection Window	
Fentanyl	Use of Fentanyl (Actiq, Duragesic, Sublimaze) morphine metabolism	2-6 Days	
Norfentanyl			
Drug	Reason for Positive Consistent / Inconsistent	Detection Window	
Norfentanyl	Metabolite of Fentanyl. Use of Fentanyl (Actiq, Duragesic, Sublimaze) morphine metabolism	2-6 Days	
Opiates			
Drug	Reason for Positive Consistent / Inconsistent	Detection Window	
Hydromorphone	Use of hydromorphone; Metabolite of Hydrocodone. Low levels consistent with morphine metabolism	1-4 Days	

Laboratory Accession:		Donor's Name:		
Containers: 01: Urine		Urine, Random	Test(s): 70195 DetectMed Panel, Expanded (Urine)	
Analyte Name	Result	Cut-off	Unit	Loc
AMPHETAMINES	Negative	500	ng/mL	
BARBITURATES	Negative	200	ng/mL	
BENZODIAZEPINES	Negative	75	ng/mL	
BUPRENORPHINE/METABOLITE	Negative	5	ng/mL	
CANNABINOIDS	Negative	20	ng/mL	
CARISOPRODOL/METABOLITE	Negative	100	ng/mL	
COCAINE/METABOLITES	Negative	150	ng/mL	
FENTANYL	Negative	2	ng/mL	
METHADONE/METABOLITE	Negative	100	ng/mL	
OPiates	POSITIVE	50	ng/mL	
Morphine	POSITIVE	CONSISTENT	10	ng/mL
Morphine, Quant	POSITIVE	CONSISTENT	>10000	ng/mL
Codene	POSITIVE	INCONSISTENT	10	ng/mL
Codene, Quant	POSITIVE	INCONSISTENT	15	ng/mL
Hydromorphone	POSITIVE	CONSISTENT	10	ng/mL
Hydromorphone, Quant	POSITIVE	CONSISTENT	50	ng/mL
PROPOXYPHENE/METABOLITE	Negative	300	ng/mL	
TRAMADOL/METABOLITE	Negative	200	ng/mL	
ALCOHOLS	Negative	0.02	% (w/v)	
ACETAMINOPHEN	Negative	10	ug/mL	
CREATININE	Normal	5	mg/dL	
Creatinine, Quant	Normal	95.9	mg/dL	
pH	Normal			
GENERAL OXIDANTS	Negative		200	ug/mL
MEDICATIONS LISTED:	=====			
1)	Mg Fentanyl			

Urine Drug Test - Quick Reference		
"Positive Consistent"	drug (or metabolite) detected and IS included in list of medications	
"Positive Inconsistent"	drug (or metabolite) detected and IS NOT included in list of medications	
"Negative Inconsistent"	drug (or metabolite) NOT detected or below cutoff level and IS included in list of medications	
Opiates		
Drug	Reason for Positive Consistent / Inconsistent	Detection Window
Codaine	Use of Codeine and/or Codeine formulation; Low levels could result from dietary intake of poppy seeds, Low levels could be due to an impurity in "street" heroin	1-4 Days
Morphine	Use of Morphine; Metabolite of Codeine; Low levels may result from dietary intake of poppy seeds, Metabolite of Heroin, 6-MAM may also be detected	1-4 Days
Hydromorphone	Use of hydromorphone; Metabolite of Hydrocodone; Low levels consistent with morphine metabolism	1-4 Days

Laboratory Accession:		Donor's Name:		
Containers(s): 01: Urine		Urine, Random	Tests(s): 70195 DetectMed Panel, Expanded (Urine)	
Analyte Name	Result	Cut-off	Unit	Loc
AMPHETAMINES	POSITIVE	500	ng/mL	
Amphetamine	POSITIVE INCONSISTENT	50	ng/mL	
Amphetamine, Quant		>10000	ng/mL	
BARBITURATES	Negative	200	ng/mL	
BENZODIAZEPINES	POSITIVE	75	ng/mL	
Lorazepam	POSITIVE INCONSISTENT	50	ng/mL	
Lorazepam, Quant		1300	ng/mL	
BUPRENORPHINE/METABOLITE	Negative	5	ng/mL	
CANNABINOIDS	Negative	20	ng/mL	
CARISOPRODOL/METABOLITE	Negative	100	ng/mL	
COCAINE/METABOLITES	Negative	150	ng/mL	
FENTANYL	Negative	2	ng/mL	
METHADONE/METABOLITE	Negative	100	ng/mL	
OPIATES	POSITIVE	50	ng/mL	
Morphine	POSITIVE INCONSISTENT	>10000	ng/mL	
Morphine, Quant		10	ng/mL	
Hydromorphone	POSITIVE	10	ng/mL	
Hydromorphone, Quant		100	ng/mL	
Oxycodone	POSITIVE	10	ng/mL	
Oxycodone, Quant	CONSISTENT	11	ng/mL	
Oxymorphone	POSITIVE	10	ng/mL	
Oxymorphone, Quant	CONSISTENT	29	ng/mL	
PROPIONOXYPHENE/METABOLITE	Negative	300	ng/mL	
ALCOHOLS	Negative	0.02	% (w/v)	
TRAMADOL/METABOLITE	Negative	200	ng/mL	
ACETAMINOPHEN	Negative	10	ug/mL	
CREATININE	Normal	5	mg/dL	
Creatinine, Quant		157.1	mg/dL	
pH		6.4		
GENERAL OXIDANTS	Negative	200	ug/mL	
MEDICATIONS LISTED	=====			
	Esopopod			

Urine Drug Test - Quick Reference		
"Positive Consistent"	drug (or metabolite) detected and IS included in list of medications	
"Positive Inconsistent"	drug (or metabolite) detected and IS NOT included in list of medications	
"Negative Inconsistent"	drug (or metabolite) NOT detected or below cutoff level and IS included in list of medications	
Amphetamine		
Drug	Reason for Positive Consistent / Inconsistent	Detection Window
Amphetamine	Use of Amphetamine (Adderall); Metabolite of Methamphetamine	1-4 Days
Benzodiazepines		
Drug	Reason for Positive Consistent / Inconsistent	Detection Window
Lorazepam	Use of Lorazepam (Ativan)	1-10 Days
Opiates		
Drug	Reason for Positive Consistent / Inconsistent	Detection Window
Morphine	Use of Morphine; Metabolite of Codeine; Low levels may result from dietary intake of poppy seeds; Metabolite of Heroin, 6-MAM may also be detected	1-4 Days
Hydromorphone	Use of hydromorphone; Metabolite of Hydrocodone; Low levels consistent with morphine metabolism	1-4 Days
Oxycodone	Use of oxycodone &/or oxycodone formulation morphine metabolism	1-4 Days
Oxymorphone	Use of oxymorphone; Metabolite of Oxycodone morphine metabolism	1-4 Days

Ongoing Assessment for Opioid Management.

- 4 A's: Analgesia, ADLS, Adverse Events, Aberrant Behaviors.
- Frequency of visits
- Have a system in place to deal with non-compliance and/or issues with lost or stolen medications.
- Know of resources in your region that can deal with addiction, abuse, diversion

Multidisciplinary Pain Care

- | | |
|---|--|
| • Pros: | • Difficulties: |
| • Improved patient outcomes | • Overhead Costs. |
| • Multifaceted approach with less reliance on one modality. | • Coordination of care incorporating multiple specialties. |
| • Decreased long term cost for insurers. | • Patient compliance. |
| | • Buy in from insurers. |
| | • Support from referral sources. |

Case Study Acute Back Pain

- 38 yo male construction worker injured his lower back picking up a 100 pound bag of concrete mix x 3 days ago.
- Reports feeling an initial burning sensation in his lower back that progressively became more problematic as his work day progressed and states it is now a constant ache.
- Denies a radicular component or any associated symptoms.

Case Study Acute (continued).

- Patient X has tried taking Tylenol and using ice compresses with minimal benefit.
- PE: 2 + lumbar paraspinial muscle tenderness and spasm noted bilaterally. No lumbar spinous process tenderness, no SI joint tenderness, negative straight leg raise while sitting and supine, ROM limited to pain in all plains of motion, strength is 5/5 BLEs with flexion and extension. Reflexes are 2+ patella and achilles bilaterally.

Case Study Acute (continued)

- Assessment: Lumbar strain
- Plan: OTC NSAIDs and course of PT with a focus on proper lifting techniques, postural exercises, and stretching, 40 pound weight restriction at work.
- Outcome: Patient completed PT in 4 weeks and is performing HEP at home. No longer on NSAID and is back to full duty without restrictions.

Case Study: Chronic Back Pain

- 45 yo male with a c/o back pain x 3 years s/p lifting injury at work. Reports lifting a heavy object in a forward flexed position when he felt a popping sensation in his lower back and pain down into his RLE.
- Initially Presented to occupational health and was referred for a course of PT, given a medrol dose pak, and flexeril for his pain, with poor response and has been on light duty since the injury.

Chronic Pain Case (continued)

- MRI of Lumbar spine revealed an L4-5 HNP with NF narrowing on the right.
- Patient did not want surgery or injections therefore was put on Percocet per PCP to manage his symptoms medically.
- Pain became more problematic and medications were becoming less effective. PCP referred for Pain Management Evaluation.

Chronic Pain Case (continued)

- PE: Pain to palpation along lumbar paraspinal musculature bilaterally, no lumbar spinous process tenderness or SI joint tenderness noted. ROM limited with forward flexion and lateral flexion to the right due to pain. SLR positive at 45 degrees on the right. Strength 4+/5 in RLE and 5/5 LLE. Reflexes wnl. Decreased sensation to light touch along the L5 dermatomal distribution in the RLE as compared to the LLE.

Chronic Pain Case (continued)

- Assessment:
- 1. Lumbar HNP at L4-5 with a radicular /neuropathic component to pain along L5 distribution.
- 2. Opioid dependence: using # 6 10/325 mg Percocet per day.
- 3. Alternate medications: May benefit from trial of Gabapentin for radicular pain.
- 4. Needs another course of PT for strengthening of RLE.

Chronic Pain Case (continued)

Plan:

- 1. Obtain EMG of RLE to R/O a radiculopathy.
- 2. Change opioid regimen to Roxicodone 15 mg tid prn to eliminate long term Tylenol use, decrease frequency of dosing, and lower total daily dose of opioid.
- 3. Add Neurontin to medication regimen for neuropathic component.
- 4. Course of PT.
- 5. Consider interventional options if above fails

Chronic Pain Case (continued)

- **Outcome:** EMG showed a slight right sided L5 radiculopathy. Neurontin was titrated to 1800 mg/day and patient was able to decrease Roxicodone frequency to bid prn, taking at end of work day.
- Patient did well in PT and was able to increase his hours from 24 to 32 hours per week and his lifting capacity was increased from 10 to 25 pounds.
- Patient wishes to forego surgery or procedures at this time.

