OPIOID WITHDRAWAL PROTOCOL

Clinical Features of Opioid Withdrawal
- detected & monitored using the *Opioid Withdrawal Scale* (OWS)

Physical signs/symptoms	Lacrimation, rhinorrhea, yawning Dilated pupils, nausea/vomiting Diaphoresis, chills, piloerection, mild tachycardia and/or hypertension Myalgias, abdominal cramps, diarrhea
Psychological symptoms	Anxiety and dysphoria Craving for opioids Restlessness, insomnia, fatigue

Onset & Duration of Symptoms

Beginning <8 hours from last opioid use (Peak within 36-72h)	Anxiety, fear of withdrawal, craving for drug, diaphoresis, chills, lacrimation, rhinorrhea, yawning
Beginning 12 hours from last opioid use (Peak at 72 h)	Piloerection, anorexia, dilated pupils, anxiety, irritability dysphoria, restlessness, mild-moderate insomnia, tremor, mild tachycardia and/or hypertension, abdominal cramps
Beginning 24-36 hours from last opioid use (Peak at 72 h)	Abdominal cramps, diarrhea, myalgias, muscle spasms (esp. in lower extremities), nausea, vomiting, diarrhea, severe insomnia, violent yawning

NOTE:
- Methadone withdrawal may take longer to manifest clinically (24-48h from last dose) than withdrawal from other opioids, but may persist 2-3 weeks or longer
- Physical withdrawal symptoms generally resolve by 5-10 days
- Psychological withdrawal symptoms (dysphoria, insomnia) may last weeks to months

Complications of Opioid Withdrawal:

- Opioid withdrawal is not life threatening in otherwise healthy individuals. However, the risk of serious medical complications is higher in pregnant women and neonates.
  - Pregnancy-associated risks: spontaneous abortion, pre-term labour
  - Neonatal abstinence syndrome: seizures, death if not identified & treated
- There is a serious risk of flight, suicide (precipitated by anxiety, dysphoria), and overdose on relapse (because patients begin to lose their tolerance to opioids within 3-7 days after last use).

IMPORTANT:
- Continually assess all patients for suicide risk
- Screen for pregnancy
- Warn patients about overdose if they resume opioid use at previous dose.

Developed by:
Dr, Peter Butt MD SCFP (EM), Melanie McLeod BSP, ACPR, PharmD Candidate, Christi Becker-Irvine RN

Step 1: Symptomatic Protocol + Clonidine

Symptomatic Protocol

Target symptoms	Drug	Dosing guideline
Nausea and vomiting	Dimenhydrinate (Gravol®)	50mg-100mg orally (or IM) up to every 4 hours as needed
	Prochlorperazine (Stemetil®)	5mg-10mg orally up to every 4 hours as needed
Diarrhea	Loperamide (Imodium®)	4mg orally for diarrhea, then 2mg orally as needed for loose bowel movements (Maximum dose =16mg/24h)
Myalgias	Acetaminophen (Tylenol®)	325mg-650mg orally every 4 hours as needed (Maximum dose = 4000mg/24h)
	Naproxen (Naprosyn®)	500mg orally twice daily with meals for 4 days, then reduce to twice daily as needed
Anxiety, dysphoria, lacrimation, rhinorrhea	Hydroxyzine (Atarax®)	25mg-50mg orally three times daily as needed
Insomnia	Trazodone (Trazorel®)	50mg-100mg orally at bedtime x 4 days, then as needed for insomnia

Clonidine

Dose	Monitoring
Clonidine 0.1mg oral test dose	• Check blood pressure (BP) one hour later. If BP<90/60, if marked postural hypotension occurs or if HR<60- do not prescribe further
If <91kg (or <200lbs): • Clonidine 0.1mg orally 4 times daily x 4 days • Clonidine 0.05mg orally 4 times daily x 2 days • Clonidine 0.025mg orally 4 times daily x 2 days, then stop **If >91kg (or >200lbs):** • Clonidine 0.2mg orally 4 times daily x 4 days • Clonidine 0.1mg orally 4 times daily x 2 days • Clonidine 0.05mg orally 4 times daily x 1 day, • Clonidine 0.025mg orally 4 times daily for 1 day, then stop	• Check BP prior to each dose and withhold dose if BP<90/60, if marked postural hypotension or dizziness occurs or if HR<60 **Assess Opioid Withdrawal Score (OWS) at least every 24 hours:** • **If after 24 hours the OWS is 10-14** (suggesting moderate withdrawal symptoms)- **proceed to step 2** • **If after 24 hours, the OWS is >15** (suggesting severe withdrawal symptoms)- **proceed to step 3**

Step 2: Symptomatic Protocol + Intensified Clonidine

Intensified Clonidine

Dose	Monitoring
<u>If <91kg (or <200lbs):</u> • Clonidine 0.2mg orally 4 times daily x 4 days • Clonidine 0.1mg orally 4 times daily x 2 days • Clonidine 0.05mg orally 4 times daily x 1 day • Clonidine 0.025mg orally 4 times daily for 1 day, then stop **<u>If >91kg (or >200lbs):</u>** • Clonidine 0.3mg orally 4 times daily x 4 days • Clonidine 0.2mg orally 4 times daily x 1 day • Clonidine 0.1mg orally 4 times daily x 1 day, • Clonidine 0.05mg orally 4 times daily x 1 day • Clonidine 0.025mg orally 4 times daily for 1 day, then stop.	• Check BP prior to each dose and withhold dose if BP<90/60, if marked postural hypotension or dizziness occurs or if HR<60 **Assess Opioid Withdrawal Score (OWS) at least every 24 hours:** • **If after 24 hours at step 2, the OWS is >15** (suggesting severe withdrawal symptoms)- **<u>proceed to step 3</u>**

Step 3: Symptomatic Protocol + Intensified Clonidine + Phenobarbital

Intensified Clonidine + Phenobarbital

Clonidine dose	Monitoring
<u>If <91kg (or <200lbs):</u> • Clonidine 0.2mg orally 4 times daily x 4 days • Clonidine 0.1mg orally 4 times daily x 2 days • Clonidine 0.05mg orally 4 times daily x 1 day • Clonidine 0.025mg orally 4 times daily for 1 day, then stop **<u>If >91kg (or >200lbs):</u>** • Clonidine 0.3mg orally 4 times daily x 4 days • Clonidine 0.2mg orally 4 times daily x 1 day • Clonidine 0.1mg orally 4 times daily x 1 day, • Clonidine 0.05mg orally 4 times daily x 1 day • Clonidine 0.025mg orally 4 times daily for 1 day then stop.	• Check BP prior to each dose and withhold dose if BP<90/60, if marked postural hypotension occurs or if HR<60 • **Assess Opioid Withdrawal Score (OWS) at least every 24 hours**
Phenobarbital dose:	**Monitoring**
Phenobarbital 30mg-60mg orally twice daily as needed for anxiety and sedation	• Hold dose in presence of marked sedation, hypotension (BP<90/60), dizziness, ataxia, listlessness • Stop if rash develops

Step 4: Refer to a methadone prescribing physician

- **Methadone 10mg orally 3 times daily for 3-4 days, then taper by 10mg/day (5mg/day on final day).**

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- **NOTE: Methadone-related deaths have occurred almost exclusively at doses in excess of 30mg/day[10]**

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