Opioid Initiative Wave I – Treating Opioid-Use Disorder in the ED Part 1
Presenter

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emergency department management of the patient with opioid withdrawal
OD is #1 cause of death of Americans under age 50

1999-2016: more than 600,000 overdose deaths
I have chronic pain and need meds.
I overdosed and got naloxone by EMS.
I overdosed and am now in cardiac arrest.
I inject heroin and now have cellulitis / endocarditis.
I have complications from HIV or Hep C.
I sell sex to get drugs and now have an STI.
I’m homeless.
I’ve been arrested.
I’ve been assaulted.

I’m addicted to narcotics and am now in withdrawal.
I have a problem and need help.
I’m dope sick and can’t stop vomiting.
opioid withdrawal case

27F no PMH, visiting from LA opioid addict, prefers fentanyl arrives at 5p severe body aches, restlessness, vomiting, diarrhea 4 IV start attempts over 30 minutes, conflict++ receives, over **11 hours** in the ED:

- **Ondansetron** 8mg IV x 2: 16mg IV
- **Promethazine** 25mg IVPB x 2: 50mg IV
- **Clonidine** 0.2mg PO x 4 doses: 0.8mg PO
- **Lorazepam** 2mg IV x 3 doses: 6mg IV
- **Haloperidol** 5mg IV x 2 doses: 10mg IV
- **Normal Saline** 2 liters IV.

Discharged with promethazine and clonidine prescription
opioid withdrawal case

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- **Normal Saline** 2 liters IV.

Discharged with promethazine and clonidine prescription.
opioid withdrawal case
visit #2

arrives at 6p the following day
severe body aches, restlessness, vomiting, diarrhea
now also intermittently drowsy and lightheaded/presyncopal

Ondansetron 8mg IV x1: 8mg IV
Promethazine 25mg IVPB x2: 50mg IV
Clonidine 0.2mg PO x 3 doses: 0.6mg PO
Lorazepam 2mg IV x 3 doses: 6mg IV
Haloperidol 5mg IV x 1 doses: 5mg IV
Ketamine 10mg IV (0.2mg/kg) x 2 doses: 20mg IV
Normal Saline 3 liters IV

Discharged with promethazine and clonidine prescription
opioid withdrawal case visit #3

arrives at 4p the following day
severe body aches, restlessness, vomiting, diarrhea
now emotionally distraught

Ondansetron 8mg ODT
Buprenorphine 8mg SL
Ondansetron 8mg ODT
Buprenorphine 8mg SL

Discharged with suboxone 8 mg tabs
Opoid withdrawal is hell on earth

“It feels like the worst flu you ever had, the sickest you’ve ever been, at times suicidal thoughts and complete and total confidence that you are never, ever, ever going to feel better. ”

“For days, I shook uncontrollably. I sweat through my sheets. ”

“I wanted to tear my hair out of my skull and my scratch the skin off of my body.”

“It feels like the day your wife left and your kitten died and there were no more rainbows anywhere and never will be again.”

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c/o Zack Repanshek
opioid withdrawal

anxiety, irritability, restlessness, agitation
diffuse pain, myalgias, arthralgias
dysphoria, depression, hopelessness
vomiting, diarrhea, abdominal cramping
autonomic dysfunction: sweating, tremor, ↑HR/BP
rhinorrhea, lacrimation
mydriasis, yawning, piloerection
opioid withdrawal: non-opioid treatments
dysautonomia: clonidine (dexmedetomidine, lofexidine)
pain: NSAIDs, acetaminophen, gabapentin, baclofen, tizanidine
GI distress: ondansetron, phenothiazines, antihistamines, loperamide, dicyclomine, octreotide
agitation: benzodiazepines, antipsychotics, ketamine

clonidine 0.1-0.3 mg po q1-3h
dexmedetomidine start at 0.2 mcg/kg/min
lofexidine 0.2-0.4 mg po q6-12h
ibuprofen 400-600 mg po q4-6h
ketorolac 15 mg IV/IM q4-6h
acetaminophen 500-1000 mg po q6h
gabapentin 200-400 mg po q6-8h
baclofen 10 mg po q8h
tizanidine 4-8 mg po q6-8h
ondansetron 4-8 mg po/IV q4-6h
promethazine 25-50 mg IV/IM
metoclopramide 10-20 mg IV q6-8h
diphenhydramine 50 mg IV q6-8h
hydroxyzine 50-100 mg po/IM q4-6h
loperamide 4 mg po q4h
octreotide 100 mcg SC q8h
dicyclomine 20 mg po q6h
lorazepam 2-4 mg PO/IV q2-4h
diazepam 10-20 mg IV q30-60 min
midazolam 2-5 mg IM q2h
haloperidol 2-10 mg IV/IM/PO q4-6h
droperidol 1-5 mg IV/IM q4-6h
olanzapine 5-10 mg IM q4h
ziprasidone 10-20 mg IM q4h
ketamine 0.25 mg/kg IV over 20 min q2h
non-opioid treatments of opioid withdrawal do not address the underlying problem and are therefore relatively ineffective
because non-opioid treatments of opioid withdrawal are relatively ineffective, the patient’s ED course is often difficult and protracted
non-opioid treatments do not address cravings, which leave the patient much more vulnerable to self-treating with street drugs, which are more lethal than ever before
treating withdrawal with non-opioids misses the opportunity to move the patient to recovery with MAT
opioid withdrawal treatment with methadone

10 mg IM or 20 mg PO cannot be prescribed by emergency providers.

Full agonist harms: respiratory depression.
opioid withdrawal treatment with buprenorphine

partial agonist + high receptor affinity = much less likely to cause respiratory depression & blocks activity of other opioids

the patient who is therapeutic on bup is safe

can be prescribed for opioid withdrawal with an X-waiver or dispensed for 72 hours

warm handoff to outpatient care: moving OUD patients from withdrawal to recovery
precipitated withdrawal

is withdrawal caused by naloxone (or buprenorphine)

best treatment for precipitated withdrawal is TBD

usual treatment is with non-opioids

may require aggressive sedation until antagonist wears off
Emergency Department Management of the Patient with Opioid Withdrawal

Opioid withdrawal is hell on earth.
Dysphoria, anxiety, severe pain and GI distress.
A variety of non-opioid therapies can improve symptoms.
Opioid agonist therapies offer many advantages, including moving the patient to recovery with MAT.

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