EMPoweRx conference

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Novel Approaches to Buprenorphine Utilization in the ED

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Disclosures

- I have no relevant financial relationships to disclose for this presentation

Objectives

- Describe buprenorphine induction strategies in the emergency department (ED)
- Summarize monitoring and dose titration of buprenorphine
- Discuss transitions of care for the patients initiated on buprenorphine in the ED

Buprenorphine

- Partial opioid agonist
- Formulations
- Monitoring
  - Clinical opiate withdrawal scale (COWS)
  - Dose titration

J Am Coll Clin Pharm. 2022;5:214-227.

COWS

Pulse (0-4)	GI Upset (0-5)
Sweating (0-4)	Tremor (0-4)
Restlessness (0-5)	Yawning (0-4)
Pupil Size (0-5)	Anxiety or Irritability (0-4)
Bone/joint aches (0-4)	Gooseflesh skin (0-5)
Runny nose or tearing (0-4)	Total Mild = 5-12 Moderate = 13-24 Moderately severe = 25-36 Severe = 37+

Protocols

- Recent review of 31 buprenorphine initiation protocols from across US
  - Most common formulation used: sublingual buprenorphine (90%)
  - Minimum COWS before initiation: 8 (87%)
  - Initial dose ranged from 2-16mg & some varied based upon initial COWS
  - Buprenorphine prescription at discharge (90%) & naloxone (74%)

JACEP Open. 2021;2:e12606. PMID: 34877567

Question #1

Which of the following would be the most appropriate candidate for buprenorphine induction in the ED?

A. 45-year-old male with a history of OUD and currently on methadone 60mg PO daily
B. A 33-year-old female with a history of OUD and last use of heroin 36 hours ago with a COWS of 12
C. A 26-year-old male with a history of OUD and last use of heroin 48 hours ago with a COWS of 2
D. A 29-year-old female with a history of OUD and on naltrexone therapy

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High Dose Buprenorphine

- Initial dose of 4-8mg depending on initial COWS
  - Re-evaluate in 30-60 mins with repeat dosing up to 32mg total
- 366 high-dose inductions (>12mg), including 138 doses of ≥ 28mg
- Well tolerated with no serious adverse events related to buprenorphine

JAMA Netw Open. 2021;4(7):e2117128. PMID: 34264326

Micro dosing Buprenorphine

- A barrier to initiation is concern for precipitated withdrawal
- Case series of 7 patients who completed 8-day taper
- Case series of 25 ED patients given microdosing:
  - 32% on microdosing remained on agonist therapy at 30 days

Drug Alcohol Rev. 2020;39(5):588-94. PMID: 32657496

JACEP Open. 2020;1(6):1712-22. PMID: 33392580

Transdermal Buprenorphine

- Another form of microdosing
- Retrospective case series of 41 patients initiated on 20mcg/hour patch & transitioned to sublingual
- Well tolerated in 59% & 38 patients were transitioned to sublingual successfully by hospital discharge

Clin Toxicol. 2022 Jan 20;4;1-6. PMID: 35048759

ER Buprenorphine

- Ongoing RCT: ED-INNOVATION study at ~30 ED's
- Sublingual vs. 7-day ER injectable in ~2,000 patients
- Primary outcome of engagement in formal addiction treatment at 7 days

Contemp Clin Trials 2021 May;104:106359. PMID: 33737199

- Take away: Not a one-size fits all!

- Individualize treatment plans based upon the patient & response to treatment!

Question #2

JM is a 24-year-old female with OUD presenting to the ED for withdrawal symptoms. The patient was deemed a candidate for buprenorphine and her initial COWS was 12. A dose of buprenorphine 8mg PO was given to the patient and one hour later she is reassessed, and her COWS is a 0. Based upon her current COWS, which of the following would be the most appropriate for JM at this time?

A. Repeat another dose of buprenorphine 8mg
B. Administer naloxone
C. No therapy is warranted at this time
D. Administer methadone 20mg PO as buprenorphine isn't effective

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Take Home Buprenorphine

- Retrospective review of 155 patients given (6) 8-2mg buprenorphine/naloxone films as a take-home supply from the ED
  - 35 patients received initial dose in ED & 120 at home
- 45.2% of patients filled buprenorphine Rx at 3 months and 41.3% at 6 months

Clin Toxicol. 2021 Aug 19;1-4. PMID: 34409916

Tele-Buprenorphine

- Retrospective cohort of an ED-callback pilot project
  - 254/606 (42%) of patients could be contacted post ED discharge
  - 140 were referred to harm reduction services, 35 to community health services, and 39 to a MOUD provider
- Group also created a 24/7 hotline “tele-bridge” clinic
  - Resulting in 93 calls & 74 new buprenorphine prescriptions

Am J Emerg Med. 2021 Dec;50:409-12. PMID: 34481260

J Subst Abuse Treat. 2021 May;124:108283. PMID: 33771282

Clinical Decision Support (CDS)

- EMergency department-initiated BuprenorphinE for opioid use Disorder (EMBED)
- Implementing a CDS in 20 ED's across 5 healthcare systems
- Results from one site showed increase rates of buprenorphine initiation, naloxone prescribing, and number of physicians prescribing

Acad Emerg Med. 2020;27(8):753-63. PMID: 32352206

J Psychiatr Brain Sci. 2020;5:e200003. PMID: 32309637

Transitions of Care

- ASSERT Model
- Bridge Model
- ED-Bridge Model

West J Emerg Med. 2020;21(6):257-263. PMID: 33207174

Question #3

JM is now ready for discharge from the ED after successful initiation of buprenorphine, which of the following would be the best transition of care strategy for JM?

A. No prescription or follow-up care guidance
B. Prescribe buprenorphine
C. Prescribe buprenorphine and naloxone
D. Prescribe buprenorphine, provide naloxone, and give a warm handoff to where JM is following up for outpatient care

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