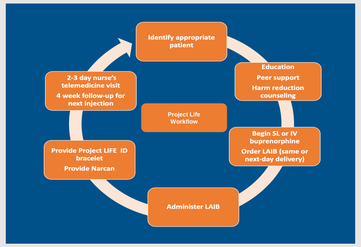
Accelerated Inpatient Transition from Methadone to Long-Acting Injectable Buprenorphine

Introduction

- While methadone is an evidence-based treatment for OUD, many patients experience barriers such as the required daily clinic attendance, limited clinic hours, transportation, limits to dose titration, and stigma.
- Some patients with opioid use disorder (OUD) may benefit from transitioning from methadone to buprenorphine.
- There is a risk of precipitated withdrawal due to the long half-life of methadone. Hospitalization may present an opportunity to transition patients in a controlled setting.
- Long-acting injectable buprenorphine (LAIB) may represent an opportunity to address barriers to adherence.
- **Here, we present two cases demonstrating that an accelerated transition from methadone to LAIB in the hospital setting is feasible using advanced buprenorphine induction techniques.**

Background

- In August 2022, in response to rising opioid overdose rates, the PCC Addiction Medicine Consult Service (AMCS) at West Suburban Medical Center started **Project LIFE,** a hospital-based LAIB program.
- Patients were selected for accelerated transition from methadone to LAIB based on a history of OUD, stable outpatient methadone treatment, and the desire to transition from methadone maintenance therapy to LAIB.
- Patient consent was obtained to participate in this case report, and IRB exemption was obtained.



Case #1

62-year-old African-American male presented to the emergency room with opioid withdrawal.
OUD History: was on methadone 100 mg daily with ongoing intermittent heroin use
- last methadone dose was day of admission
- concomitant cocaine use

Day #1
- Seen by Addiction Medicine Consult team in the ED
- Expressed the desire to transition from methadone to LAIB due to ***difficulty attending methadone clinic daily***
- Counseled on risks of precipitated withdrawal
- COWS score: 6

Day #2
- Denied withdrawal symptoms
- **2:48pm: 300 mg LAIB administered**

Day #3
- Discharged home

Follow-Up
- **Establishes care with outpatient addiction medicine clinic upon discharge:**
- LAIB dose decreased to 100 mg
- Ongoing but decreasing heroin use
- Receives ten LAIB doses outpatient

- **5:45pm: started on continuous infusion of 3.6 mg of IV buprenorphine, which delivered 0.15 mg/hr over 24 hrs**
- Oxycodone 10 mg every 4 hrs
- PRN ondansetron and lorazepam ordered but not required

- IV buprenorphine infusion continued until 5:45pm
- Continued to receive oxycodone 10 mg every 4 hrs for another 24 hrs
- Does require ondansetron due to nausea and vomiting that night

- Lost to follow-up for two months with a return to use
- Re-engaged in care
- **Restarted LAIB via low-dose buprenorphine induction in the clinic**

Case #2

54-year-old African-American female admitted for COPD exacerbation and pneumonia.
- Required BiPAP on admission
- Severe opioid withdrawal with a COWS of 14

OUD History: was on methadone 70 mg with ongoing regular heroin use
- Last methadone dose was the day prior to admission
- Concomitant cocaine use

Day #1
- Seen by Addiction Medicine Consult team in the ED
- Expressed the desire to transition from methadone to LAIB due to ***frustration with her opioid treatment program rules***
- Counseled on risks of precipitated withdrawal

2:00pm: 300 mg LAIB administered
- Had episode of emesis, received 10 mg dicyclomine
- Administered 20 mg oxycodone every 8 hrs and 0.1 mg clonidine every 4 hrs overnight

Day #3
- Discharged home

Follow-Up
- Established care with outpatient addiction medicine clinic upon discharge

1:37pm: administered 2.1 mg of IV buprenorphine over one hr, 20 mg oxycodone and 1 mg IV lorazepam under direct supervision of AMCS attending physician

Day #2
- Still experienced some residual nausea and vomiting but reported feeling well overall

- Received four LAIB doses outpatient before being lost-to-follow-up

Conclusions

- The transition from methadone to LAIB can be accomplished in the hospital using advanced buprenorphine techniques that including high-dose IV buprenorphine with full opioid agonist medications.
- Patient consent should be obtained and the risk of precipitated withdrawal should be reviewed prior to initiation of buprenorphine.
- Transitioning from methadone to LAIB in the hospital setting may be an option for select patients.

Limitations to application of this protocol:
- *Few hospitals have addiction medicine consult services.*
- *IV buprenorphine is not on formulary at many hospitals.*
- *It can be difficult to prescribe and administer LAIB in hospitals.*

Authors & Disclosures

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