Craving Recovery:

Nuances of Medication Assisted Treatment for Opioid Use Disorder

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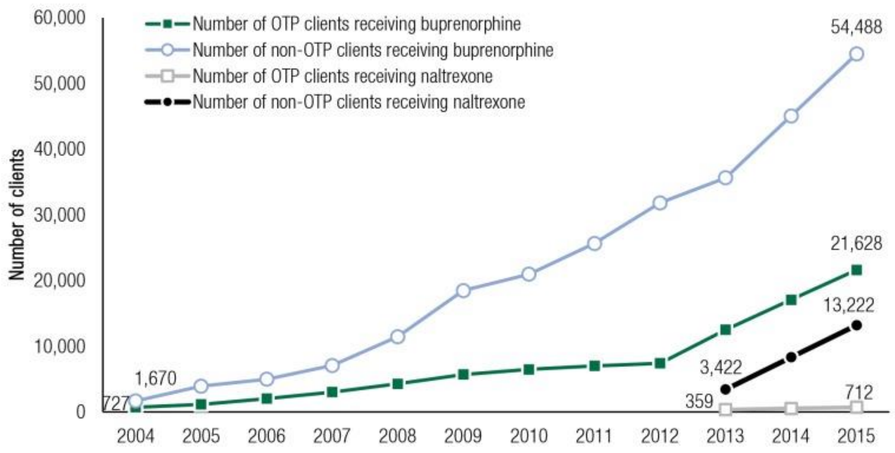
INTRODUCTION

Opioid Use Disorder (OUD) is a chronic illness with high morbidity and mortality. There are three FDA-approved pharmacotherapies for medication-assisted treatment (MAT) that are designed to work in conjunction with behavioral treatment to improve outcomes.

Buprenorphine and methadone are the two more commonly prescribed, but emerging evidence suggests that extended release naltrexone injectable (XR-NTX) is equally effective while uniquely advantageous.[1-3] Its principle limitation is the necessity to await completion of opioid withdrawal prior to initiation.

Methadone	Buprenorphine	XR-NTX
Full agonist	Strong partial agonist	Antagonist



Number of Clients Receiving Buprenorphine or Extended Release Naltrexone at Opioid Treatment Programs (OTPs) and in Facilities without OTPs (non-OTPs): 2004 to 2015.[1]

CASE PRESENTATION

A 39 year-old homeless man with two decades of heroin use history and HBV/HCV cirrhosis was admitted after a seizure with a hospital course complicated by acute liver injury and thrombocytopenia. The inpatient addiction medicine team was consulted a week into his hospitalization for OUD treatment planning.

Opioid Use Disorder History:

- Multiple prior medical detoxifications but declined MAT.
- Prior illicit buprenorphine and methadone use.
- Negative experience with illicit buprenorphine which resulted in traumatic opioid withdrawal, chronic pain flare, and relapse to heroin.
- Currently abstinent for 1 week.
- No symptoms of acute opioid withdrawal, but endorsed dreams of using heroin.

Labs:

PLT 70 $_{K/cu\ mm}$ AST 500 $_{U/L}$ ALT 1100 $_{U/L}$ T Bili 1.0 $_{mg/dL}$ INR 1.75

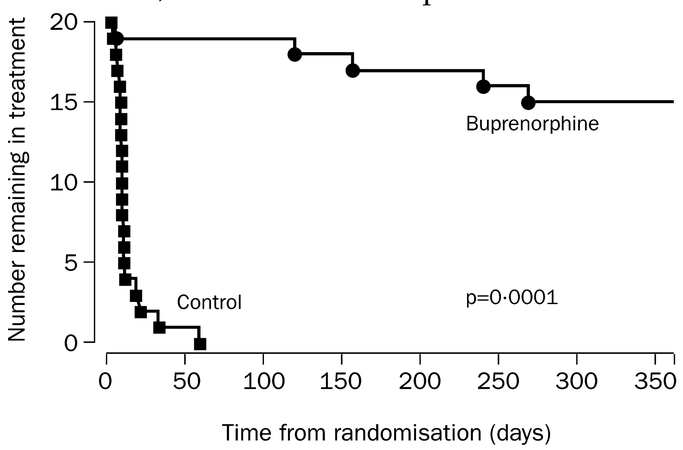
Management:

- He requested XR-NTX because of his negative experiences with illicit buprenorphine. Starting XR-NTX was possible after his 1 week of abstinence, but contraindicated by his acute liver injury. Cirrhosis alone is not a contraindication.
- We considered awaiting clinical improvement and then beginning XR-NTX.
- During in-hospital follow-up, a flare of chronic back pain and concern that XR-NTX would be less effective for pain prompted him to pick buprenorphine instead.
- He was stabilized on sublingual buprenorphine-naloxone at 16mg daily and planned to continue in a MAT program.

DISCUSSION

Necessity of MAT

Treatment of Opioid Use Disorder should include medication, even after acute opioid withdrawal.

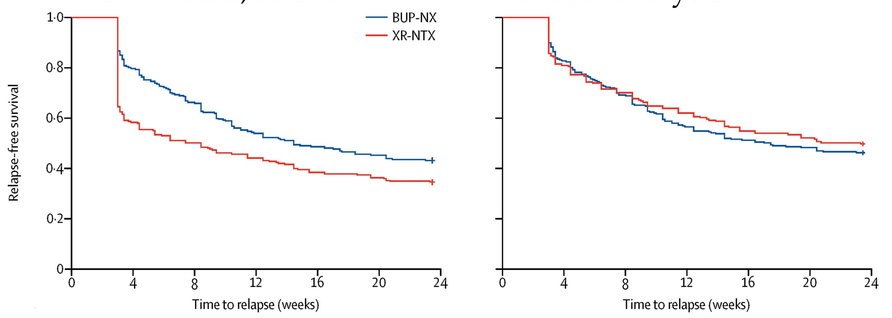


A small Swedish RCT: buprenorphine in addition to treatment programming versus treatment programming alone.[7]

- Blinded RCT of buprenorphine vs. placebo: the buprenorphine group had more opioid free urine tests and reduced craving.[6]
- Blinded RCT of XR-NTX vs. placebo: the XR-NTX group had greater duration of abstinence, craving reduction, and treatment retention.[2]

XR-NTX vs. Buprenorphine

XR-NTX and Buprenorphine have similar efficacy once XR-NTX is initiated, as shown in Per Protocol analysis.[3]



(A) XR-NTX vs. Buprenorphine (Intention To Treat) (B) XR-NTX vs. Buprenorphine (Per Protocol)

Relapse-free survival in X:BOT, a large RCT. [3]

	Initiation	Contraindications	Patient Factors
Bup.	During moderate acute opioid withdrawal	• Liver or Renal failure	• Dependency-forming • Daily dose of oral dissolving tablet or film
XR-NTX	Following 3-7 days of complete opioid abstinence	• Liver or Renal failure • Transaminitis > 3-5 times upper limit of normal • Pregnancy & Lactation • Thrombocytopenia	• No dependency • Monthly IM injection

[2,3]

Treating OUD and Comorbid Chronic Pain

Comorbid chronic pain must be recognized and can be addressed by education and shared decision making regarding MAT options.

- In opioid dependent patients with chronic pain, methadone and buprenorphine had comparable analgesic effects.[5]
- Buprenorphine and XR-NTX were comparable MAT strategies for OUD patients with comorbid mild to moderate chronic pain, and XR-NTX initiation did not exacerbate chronic pain.[4]

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