Non-opioid Protocol for Opioid Detoxification and/or Transition to Antagonist Treatment

Introduction

Study Objectives
A variety of protocols exist for opioid withdrawal management. We present a retrospective chart review study of a novel non-opioid detoxification protocol that utilizes tizanidine, gabapentin, and hydroxyzine in comparison with a buprenorphine/naltrexone (bup/nx) protocol.

This study assesses treatment retention, discharge to further chemical dependency treatment, length of stay, symptom severity, and adverse effects in both groups.

Background
In response to the national opioid addiction epidemic of the past 10 years, addiction medicine physicians and other clinicians are often faced with the challenge of opioid withdrawal management.

Adequate symptomatic relief from opioid withdrawal symptoms plays a key role in effective management during the early phase of opioid cessation, allowing for engagement in behavioral treatment and potential transition to naltrexone antagonist therapy.

While various protocols and strategies have been described, such as use of buprenorphine (1), there is no standard evidence-based treatment. A non-opioid and benzodiazepine-free protocol has advantages over opioid-based protocols (2), particularly if transitioning to opioid antagonist treatment (3).

Other withdrawal protocols utilize benzodiazepines or other controlled substances, which can further delay or compromise the goal of addiction recovery.

Design & Methods

Retrospective chart review study of DSM IV-diagnosed opioid-dependent individuals admitted for inpatient detoxification between 1/1/11 and 11/30/12. A total of 84 (out of 324 total) non-opioid and 40 (out of 260 total) bup/nx protocol subjects included. Exclusions: polysubstance use, discharge to buprenorphine treatment, pregnancy, medical problems requiring escalation in care.

Non-opioid protocol:
- Tizanidine 8 mg po q6 h
- Hydroxyzine 100 mg po q4 h
- Gabapentin 300 mg po TID, 600 mg qHS

Buprenorphine/naloxone protocol:
- Day 1: 2 mg SL q2 h x 3, 8mg SL BID
- Day 2-3: 8 mg SL
- Day 4: 4 mg SL

Outcomes:
- Primary-Treatment retention (detox completion), discharge to further CD treatment
- Secondary- Length of stay, adverse effects, COWS scores, ancillary medication use, initiation of injectable ER naltrexone

Results

Non-opioid subjects had a greater treatment retention (p=0.026) and discharge to further chemical dependency treatment (p=0.006) than bup/nx subjects.
- COWS scores were similar across both groups; analysis of days 5 and 6 was limited due to small sample size.
- Incidence of bradycardia was 37 (44%) in non-opioid group versus 26 (65%) in the bup/nx group (p=0.029).
- A total of 28.6% (95% CI 19 to 40%) in the non-opioid group were transitioned successfully to injectable ER naltrexone treatment.
- No AMA discharges due to adverse medication effects were reported in either arm.

No significant difference in:
- Asymptomatic hypotension (26.2% v. 35%)
- Symptomatic hypotension (8.3% v. 10.0%)
- Ancillary medication use (11.6 v. 11.8 doses)
- Length of stay (3.6 v. 3.4 days)

Conclusion

This study describes a novel non-opioid detoxification protocol that utilizes scheduled tizanidine, hydroxyzine, and gabapentin, allowing for the initiation of antagonist therapy prior to hospital discharge. Of note, no benzodiazepines or other controlled substances are used in this protocol.

The non-opioid protocol was found to be superior to a bup/nx protocol for treatment retention and discharge to further treatment, and was non-inferior for symptom control and length of stay. Utilizing a non-opioid detox protocol allowed a greater flexibility in discharge medication options, with more patients from this group receiving injectable ER naltrexone treatment prior to discharge.

This study excluded polysubstance-using patients, resulting in a smaller but more consistent sample group.

The study’s retrospective design did not allow for direct temporal comparison between groups. However, by demonstrating an effective, novel non-opioid detoxification protocol, we offer the treating clinician a useful tool to address the varied needs of the increasing population of opioid-dependent individuals seeking treatment.

References