

Unprescribed Ketamine Use & Withdrawal Syndrome

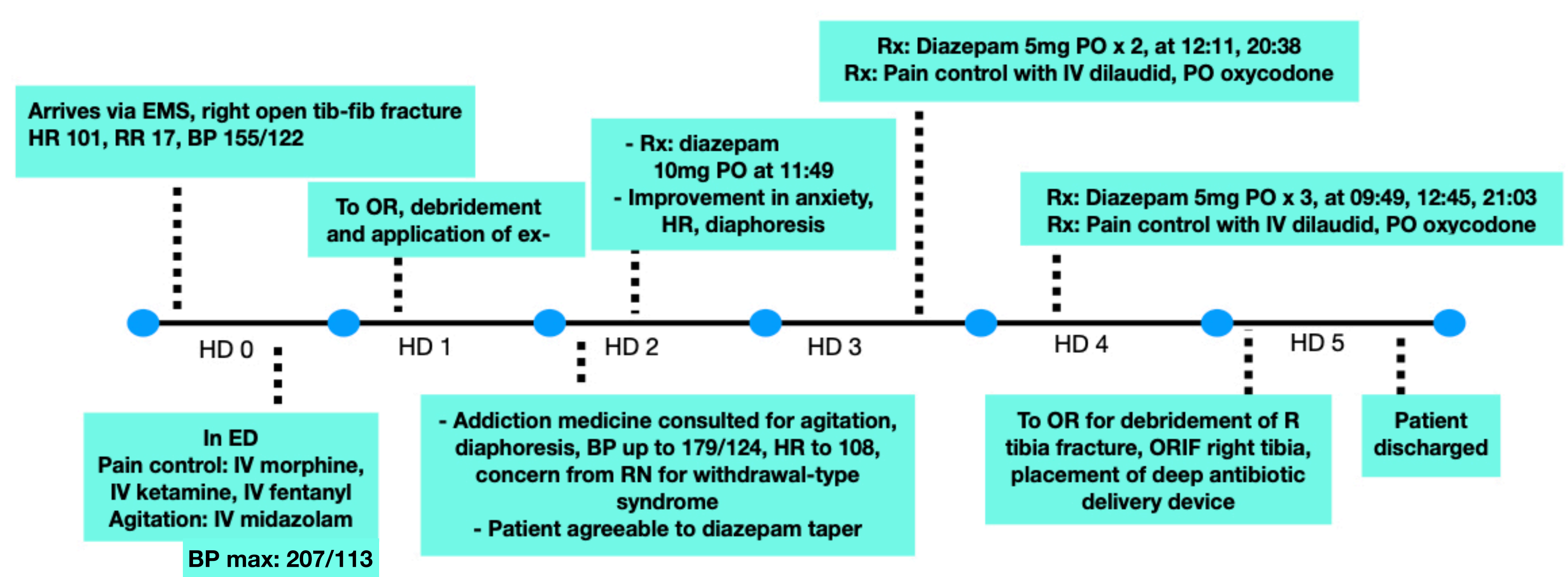


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*Both authors have no disclosures

Introduction	Case	Medical Management
<ul style="list-style-type: none"> • Ketamine is a non-competitive antagonist at NMDA subtype glutamate receptors • First described in the treatment of psychiatric conditions in 1973¹ • Medically used for analgesia, sedation, treatment refractory depression • Increasingly, ketamine is used illicitly with >1,500 pounds of ketamine seized in 2022², a 1100% increase from 2017 	<ul style="list-style-type: none"> • 35 y/o male with a right open tib-fib fracture • Addiction team consulted with concern for a ketamine use disorder & potential withdrawal syndrome • Patient reported near-daily use of 0.5-1.0 grams of insufflated ketamine x 2 years • Patient was very confident in his supply NOT being contaminated with fentanyl or xylazine • Withdrawal-like syndrome: severe hypertension, anxiety, agitation, & diaphoresis 	<ul style="list-style-type: none"> • We considered a component of opioid withdrawal, due to ketamine's interaction with the opioid system of neurotransmitters, but the patient's pain was managed with PRN IV fentanyl, IV hydromorphone, PO oxycodone • We considered use of low dose methadone to attenuate ketamine withdrawal & discomfort due to its opioid agonism & anti-NMDA properties • We considered use of dronabinol, a synthetic THC analogue, in case the patient's cannabis use was factoring into his withdrawal syndrome • We successfully treated his potential ketamine withdrawal syndrome with short, scheduled taper of diazepam

Clinical Course



Additional Considerations

- Case reports describe use of antipsychotics (olanzapine), anticonvulsants (valproic acid), alpha agonists (clonidine), & benzodiazepines³ to manage agitation related to ketamine withdrawal
- Addiction medicine and hospital providers should be prepared to treat withdrawal syndrome related to chronic, unprescribed ketamine use

In the Patient's Own Words (Transcript of Interview with the Patient)



References

- 1) E. Khorramzadeh, A.O. Lotfy, The Use of Ketamine in Psychiatry, Psychosomatics. PMID: 4800188
- 2) Palamar JJ, et al. Trends in Illicit Ketamine Seizures in the US From 2017 to 2022. PMID: 37223891
- 3) Roxas N, et al. A Potential Case of Acute Ketamine Withdrawal: Clinical Implications for the Treatment of Refractory Depression. PMID: 34270337