

INTRODUCTION

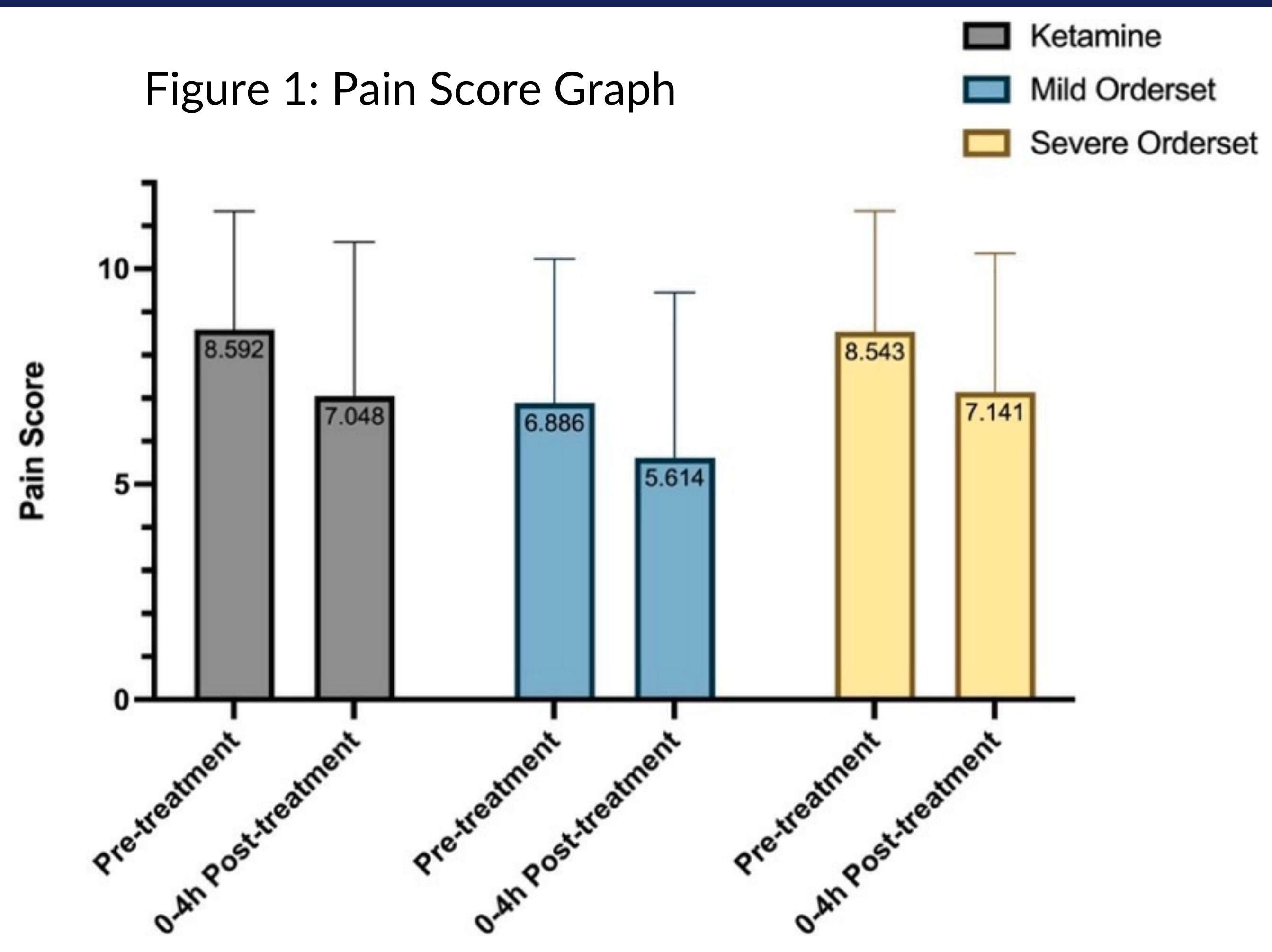
The fentanyl epidemic has coincided with the first documented cases of recreational human xylazine, originally a veterinary anesthetic. Xylazine is an alpha-two agonist sedative thought to have been used to extend the duration of the effects. The addition of synthetic opioids and xylazine to the non-medical opioid (“Tranq dope”) supply has been spreading nationwide. There is a paucity of literature on the treatment and outcomes of individuals treated for pain control while experiencing fentanyl and/or xylazine withdrawal. This study aimed to describe a cohort of individuals who received medications for pain control while experiencing Tranq dope withdrawal in the ED.

METHODS

- 270 patients received care between September 14, 2022 and May 9, 2023 were included. 179 were male (66.30%), 91 were female (33.70%), average age of 39.81.
- 100% of patients who had urine toxicology screening were positive for fentanyl.
- Inclusion criteria: individuals who were treated for medical or surgical disease, while experiencing Tranq dope withdrawal
- Exclusion criteria: patients on outpatient MOUD or pregnant
- Triplet Strategy Treatment Protocol:
 - Micro-induction buprenorphine
 - Full mu-opioid agonists (oxycodone, hydromorphone) and adjunctive treatments.
 - Adjunctive medications include ketamine, neuroleptics (droperidol, olanzapine), alpha agonists (tizanidine, guanfacine), anticholinergics (diphenhydramine) and lactated ringer IVF

Pain Management In Patients Undergoing Tranq Dope Withdrawal: Strategies And Challenges

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	Ketamine			Mild Order set			Severe Order set		
	Mean	SD	N	Mean	SD	N	Mean	SD	N
Pre-Treatment	8.592	2.746	49	6.886	3.343	44	8.543	2.798	81
0-4h Post-Treatment	7.048	3.576	63	5.614	3.841	44	7.141	3.217	99

Table 1: Pain Score Table

RESULTS

- Patients receiving mild medication order set had their pain score decrease, by an average of 18.47%.
- Patients receiving severe medication order set had their pain score decrease, by an average of 16.41%.
- Patients receiving ketamine had their pain score decrease, by an average of 17.97%.
- Recorded adverse effects were few and all resolved without complication.

DISCUSSION

- Pain control in patients experience Tranq dope withdrawal is complicated both by tolerance from large doses of synthetic opioids consumed by patients as well as, potentially, the effects of the alpha-agonist, xylazine.
- Potential treatment strategies include micro-induction buprenorphine, full mu-agonist opioids, non-opioid analgesics, ketamine, and other adjunctive medications.
- These strategies, alone or in combination, should be further evaluated for managing concurrent pain and withdrawal symptoms.

References

1. Gupta R, Holtgrave DR, Ashburn MA. Xylazine—Medical and Public Health Imperatives. New England Journal of Medicine. 2023.

2. Montero F, Bourgois P, Friedman J. Potency-Enhancing Synthetics in the Drug Overdose Epidemic: Xylazine (“Tranq”), Fentanyl, Methamphetamine, and the Displacement of Heroin in Philadelphia and Tijuana. Journal of Illicit Economies and Development. 2022;4(2).

3. Boyce T, Whitehill G, Anderson B. Management of Xylazine Withdrawal in a Patient Admitted to the Intensive Care Unit With Carbon Monoxide Poisoning. In: C48. CASE REPORTS: TOXICOLOGY AND OTHER INVOLVING MEDICATIONS. American Thoracic Society; 2023:A5204-A5204.

4. Lee EN, Lee JH. The effects of low-dose ketamine on acute pain in an emergency setting: a systematic review and meta-analysis. PloS one. 2016;11(10):e0165461.

5. Jones JL, Mateus CF, Malcolm RJ, Brady KT, Back SE. Efficacy of ketamine in the treatment of substance use disorders: a systematic review. Frontiers in psychiatry. 2018;9:277.