

Introduction

Xylazine is used as veterinary sedative, anesthetics and muscle relaxants. Xylazine intoxication is increasingly reported, with overdose-related deaths rising globally. It cause CNS, respiratory depression bradycardia and hypotension However, data on xylazine toxicity in Malaysia is limited. A 2023 case series questioned naloxone's effectiveness as an antidote. This report presents a case where naloxone led to rapid clinical improvement in acute xylazine toxicity

Case Description

A 28-year-old municipal worker was accidentally injected with a dart containing 150 mg xylazine and 150 mg ketamine while managing stray dogs. He became unresponsive and was referred to the Emergency and Trauma Department (ETD). Initially at the community clinic, his Glasgow Coma Scale (GCS) score was 3/15, with stridor, hypertension (196/67 mmHg), Heart rate is 82 bpm and pinpoint pupils. He received IV fluids and oxygen before transfer.

On arrival at the ETD, ABG show no respiratory acidosis. Total of 0.8mg of IV Naloxone was given to patient and resulted in full recovery of GCS. Patient is arousable and able to recall the incident. A small puncture wound was noted on his finger, but other examinations were unremarkable. He was discharged well after 24 hours of monitoring.

Discussion

Xylazine is a veterinary sedative with no approved human use. It acts on alpha-2 adrenergic, opioid, and other receptors, leading to neurological, respiratory, and cardiovascular depression. Due to its lipophilicity, it accumulates rapidly in the central nervous system, with effects lasting up to eight hours.

Although naloxone is primarily used for opioid toxicity, its administration in this case led to rapid CNS recovery. This suggests that xylazine act with opioid receptors, particularly the mu-receptor. Naloxone has high affinity for Mu receptor, which eliminate the effects of Xylazine

Conclusion

The primary management of xylazine toxicity focuses on supportive care, ensuring airway stability and hemodynamic support. Early naloxone administration may help reverse CNS depression, though further studies are needed to establish its efficacy, dosage, and safety in xylazine intoxication.

References

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