

Xylazine- a possible emerging threat to the OpK9 Community

Paul McNamara, DVM, DACVS

Odinsfund@gmail.com

Xylazine is a veterinary drug that provides sedation and analgesia. It is also used as a stand-alone drug or as a cutting agent with other drugs- most commonly fentanyl. Trade names for the legal drug included: Rompun, Anased , and Sedazine and while the drug is used on many different animal species, there is no approved use for humans. Street names for the illicit drug include; Tranq, Tranq dope, Sleep-cut, and Zombie drug. In its legal form it is dispensed as an injectable liquid, however it is available from overseas distributors in both liquid and powder form. Currently it is NOT a DEA controlled substance which makes access much easier and it is relatively inexpensive- with a kilogram of drug costing approximately \$10-20 currently- making it a popular cutting agent. In people it creates a similar effect as opiates and the combination of it with fentanyl may increase the duration and potency of the “high” The predominant method of abuse in humans is via inhalation or intravenous injection. Signs of xylazine intoxication in people ARE VERY SIMILAR to opiate overdose and include: pin point pupils, slow respirations, respiratory arrest and hypotension. Chronic use often results in severe tissue necrosis in the extremities- often requiring amputation. Signs of xylazine intoxication in dogs include: muscle tremors, seizures, slowed heart rate with partial heart block and slowed breathing rate. Dogs can also to swallow excess air which may result in gastric dilatation/volvulus (bloat).

While xylazine mimics the effects of opiates, it is critical to recognize that naloxone, the classic reversal agent for opiate intoxication, **DOES NOT** reverse the effects of xylazine. In addition, there are no current, street side tests available to screen for this drug making definitive diagnosis very difficult. Fortunately, there are several veterinary medications that are effective in reversing the effects of xylazine including yohimbine (0.11 mg/kg IV) and tolazine (4mg/kg IV slowly). Atipamezole (3750 mcg/M² IM or IV) is another commonly available drug that may reverse the effects of xylazine but it is currently not approved for use for this purpose. There are NO approved reversal agents in human medicine and treatment for people is largely symptomatic and directed at cardiac and respiratory support.

Given the lack of street level tests, the similarities with opiate intoxication, and the increasing risk of OpK9 exposure to xylazine, my recommendation for treatment for POTENTIAL xylazine intoxication is as follows:

1. Protect yourself and others from potential exposure utilizing all appropriate PPE and safety measures.
2. If respiratory depression is confirmed, administer Naloxone in accordance with your training. This should be done even if xylazine intoxication is highly suspected due to the strong potential for concurrent opiate exposure. Naloxone is safe to give even if the animal has not been exposed to an opiate. Remember that virtually 100% of dogs given intranasal naloxone **WILL SNEEZE** so protect against aerosolization of inhaled opiates by covering the dogs face and head.
3. Monitor for respiratory arrest and be prepared to assist with ventilatory support **IF** appropriately trained and safe to do so.
4. Initiate your K9 Emergency protocol and alert the appropriate veterinary professional of your impending arrival. Transport immediately if safe to do so but continue to monitor throughout and be prepared to intervene further if necessary.
5. Note if there are changes to respiratory frequency/depth/etc. Since xylazine and opiates are often co-mingled you may see a PARTIAL improvement in signs but not a complete resolution. If in doubt, administer another dose of naloxone to the other nostril.

6. Upon arrival to the Veterinary facility advise the doctor of the potential for xylazine exposure so that they can be prepared to administer the specific reversal agents as needed. Provide above dosing if necessary.
7. Consider obtaining a blood sample for future forensic testing.

Xylazine is a potentially life-threatening drug that is being used with increasing frequency in the United States. It is important for the OpK9 handler to be aware of this risk, the signs of potential exposure, and the treatment options available so that our OpK9s are as safe as possible. As always feel free to contact me directly with any questions or concerns.

Please contact Dr. McNamara if you have any questions at odinsfund@gmail.com