



sought substance abuse treatment, and have higher DAST-10 scores than the general population.

## 40. Recreational ingestion of a compounded topical analgesic presenting with coma and cardiotoxicity

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**Objective:** Compounded topical analgesics have historically included nonsteroidal anti-inflammatory medications or local anesthetics, however, newer compounded formulas are made with a range of pharmaceuticals, despite scant evidence to support their use and no Food and Drug Administration (FDA) regulation. Few reported cases of overdose exist in the literature. We describe a novel overdose involving a compounded topical analgesic with subsequent development of mixed toxidrome reflecting the constituent ingredients.

**Case report:** A 45-year-old man presented to the emergency department (ED) after he ingested his compounded topical analgesic. He was found unresponsive with the empty container and large amounts of the medication in his oropharynx. The medicine consumed by the patient contained 6% gabapentin, 2% baclofen, 2% amitriptyline, 1.75% lidocaine, 1.75% prilocaine, and 0.5% meloxicam with 360 g dispensed. Initial Glasgow Coma Score (GCS) was 3 and he required immediate intubation for respiratory failure. Electrocardiogram showed mild, new QRS interval prolongation of 104 ms and urine drug screen was positive for tricyclic antidepressants, which he was not otherwise prescribed. QRS narrowed to 94 ms after sodium bicarbonate, and he was admitted to the intensive care unit on a bicarbonate infusion. He was unresponsive to all stimuli for 24 hours without iatrogenic sedation. His mental status slowly improved and he was extubated on hospital day three. The patient left against medical advice on day four.

**Conclusion:** This patient's clinical presentation was consistent with a mixed toxidrome reflecting the constituent pharmaceuticals in the compounded product, which contained 21600 mg gabapentin, 7200 mg baclofen, 7200 mg amitriptyline, 6300 mg lidocaine, 6300 mg prilocaine, and 1800 mg meloxicam. The patient was comatose, with respiratory failure requiring mechanical ventilation. Central nervous system depression resulted from a combination of high dose gabapentin and baclofen. The patient additionally manifested signs of sodium channel blockade related to amitriptyline toxicity. This case describes a novel overdose on a compounded topical analgesic composed of gabapentin, baclofen, amitriptyline, lidocaine, prilocaine, and meloxicam. Given the ease of ingestion of multiple drugs with diverse mechanisms of action in concentrations vastly exceeding those of individual oral doses, these compounded agents have potential for high morbidity and mortality.

## 41. Pyoderma gangrenosum from the cocaine adulterant levamisole

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**Objective:** To present the case of a patient who developed the unusual cutaneous manifestation of pyoderma gangrenosum, attributed to the cocaine adulterant levamisole.

**Case report:** A 40-year-old female with history of heroin and cocaine use presented to the emergency department for evaluation of multiple wounds on her right forearm that had developed during the preceding week. She also noted black areas on her fingertips and ear that had been present for 1 week. She denied any fever, chills, numbness, or sensory changes. She denied ongoing injection drug use but reported insufflating cocaine 1 week ago. Vital signs showed temperature 36.6°C, blood pressure 110/62 mmHg, pulse 64, and respiratory rate 16. Examination revealed an extensive area of increased warmth, erythema and induration on the dorsum of her right forearm that was tender to palpation, with 3 large, discrete, non-healing ulcers covered in fibrinous granulation tissue. There was no expressible purulent drainage. Small necrotic nodules were noted on the fingertips of her bilateral hands. A serum drug of abuse screen (DOA9) was positive for benzodiazepines and cocaine metabolites. Hepatitis C antibody was positive, but viral RNA was not detected. Human immunodeficiency virus (HIV) testing was negative. Serologic testing was notable for positive antinuclear antibodies (ANA), positive perinuclear anti-neutrophil cytoplasmic antibodies (p-ANCA) > 1:640, and chromatin antibody concentration 5.6 IU/mL, which was consistent with levamisole-induced vasculitis. She was evaluated by plastic surgery and dermatology who concurred with the diagnosis of levamisole-induced vasculitis with resultant pyoderma gangrenosum. Her ulcerations improved with supportive care during her hospitalization, but she was lost to follow-up after discharge.

**Conclusion:** Cocaine abuse has known associated morbidity and mortality. Levamisole has been seen as an adulterant in cocaine since 2003 and has been found in up to 70% of cocaine in the US [1]. Levamisole is as an anthelmintic medication, but its use was discontinued in 1999 because of associated leukopenia, agranulocytosis, and cutaneous vasculitis [2]. Due to widespread adulteration of cocaine with levamisole, it is important to be aware of adverse effects related to its use.

## References

- [1] Abdul-Karim R, Ryan C, Rangel C, et al. Levamisole-induced vasculitis. *Proc (Baylor Univ Med Center)*. 2013;26:163–165.
- [2] Ghias AAP, Brine P. Vanishing vasculitis: a case of acute necrotic skin findings without pathologic features of vasculitis from adulterated cocaine. *J Community Hosp Intern Med Perspect*. 2017; 7:321–324.

## 42. Self-inflicted severe genital friction burns secondary to hypersexual response from synthetic cathinone and cocaine use

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**Objective:** Synthetic cathinones, known colloquially as “bath salts”, are sympathomimetic substances chemically similar to cathinone, a naturally occurring substance found in the khat plant (*Catha edulis*), which are used recreationally for stimulant and euphoric effects. Hypersexuality is a complex behavioral response that has been described as sequelae of sympathomimetic abuse in other phenylethylamine compounds. We present a unique case of intravenous synthetic cathinone abuse leading to hypersexual reaction causing self-inflicted genital friction burns.