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#### Pentobarbital Toxicity after Self-Administration of EuthasolTM Veterinary Euthanasia Medication

Steven J. Crellin DO

Lehigh Valley Health Network, steven\_j.crellin@lvhn.org

Kenneth D. Katz MD

Lehigh Valley Health Network, Kenneth\_D.Katz@lvhn.org

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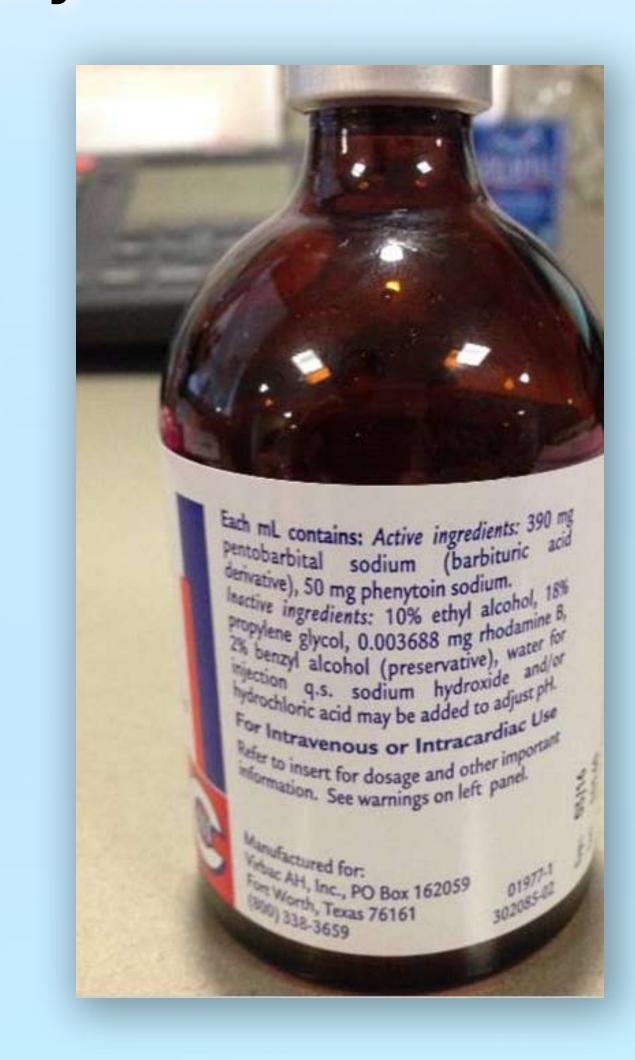
# Pentobarbital Toxicity after Self-Administration of Euthasol™ Veterinary Euthanasia Medication

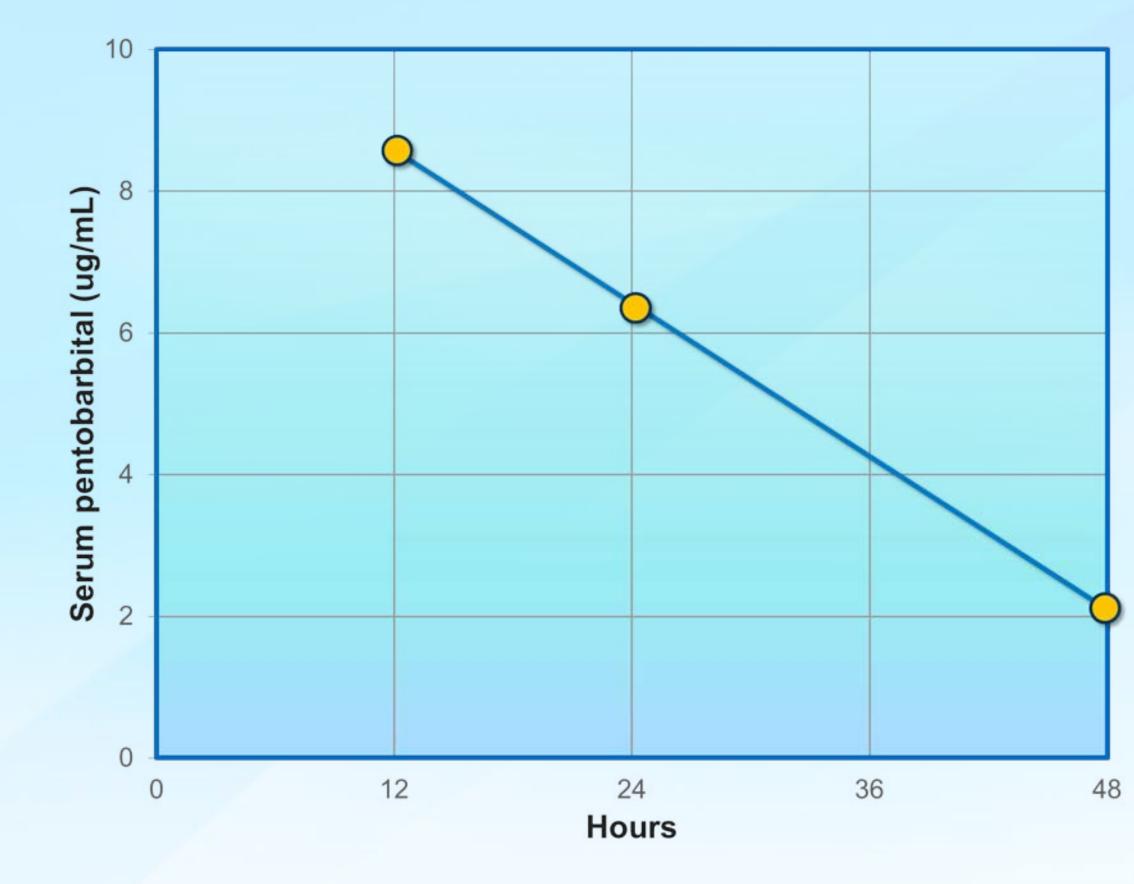
S. Jason Crellin DO, Kenneth D. Katz MD

Section of Medical Toxicology, Department of Emergency Medicine, Lehigh Valley Health Network, Allentown, PA

## Background

Sodium pentobarbital poisoning is extremely uncommon, but may occur in those who have access to veterinary medications.





# Case Report

A 48 year-old woman was found unresponsive next to a suicide note, empty pill bottles and a syringe containing a pink fluid by her veterinarian spouse. On EMS arrival, the patient was hypotensive, bradycardic, hypothermic with miotic pupils and a GCS of 3. She was transported to the ED where she was noted to have a taught, "dusky" left forearm with delayed capillary refill distally. She was endotracheally intubated and transferred to a tertiary care facility for both surgical and toxicologic care. The pink fluid was identified as EuthasoITM (390 mg/mL pentobarbital and 50 mg/mL phenytoin sodium). The patient underwent fasciotomy and supportive care for respiratory failure and mild rhabdomyolysis. Serum phenytoin levels on admission were 2.5 ug/mL. Serum pentobarbital levels declined from 12.6 ug/mL upon admission to 2.1 ug/mL at extubation, approximately 48 hours after admission. The fasciotomy wounds were repaired by plastic surgery, and the patient was discharged to an inpatient psychiatric facility on HD 13 without sequelae.

### Discussion

The patient exhibited many of the classic features of barbiturate toxicity including bradycardia, hypothermia, hypotension, respiratory depression, CNS depression, compartment syndrome, and rhabdomyolysis. Furthermore, she had direct access to veterinary euthanasia drugs. The short acting barbiturates when compared to long-acting agents differ by their more rapid onset, higher pKa values, more protein binding and lipid solubility, and have a shorter duration of action and undergo more hepatic metabolism. Hemodialysis was not utilized in this case because: 1) the clinical condition improved spontaneously and 2) this modality appears less effective for the short-acting agents compared to long-acting ones.

### Conclusion

Pentobarbital poisoning is rare, but still can be lethal. Patient access to veterinary euthanasia agents is the critical clue. Meticulous cardiopulmonary support is the mainstay of therapy.



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