

A Veteran and His Dog

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One Health Component Addressed: Environmental health

Proposed Audience: This case is appropriate for second and third year medical students, third year veterinary students, second and third year pharmacy students, and junior and senior nursing students. Other professional students may be included as deemed appropriate by the facilitator.

Case Synopsis

Worldwide, carbon monoxide (CO) poisoning is the leading cause of toxicological deaths in humans, accounting for 50,000 emergency room visits and 400 deaths every year.^{1,2} CO poisoning is often linked to gas leaks and usage of alternative sources of heat or power such as charcoal burners and gasoline powered generators. These exposures put humans and animals at risk for poisoning from the colorless, odorless gas. In humans, symptoms are non-specific and usually described as “flu-like,” making diagnosis difficult. In dogs, CO poisoning can present as lethargy or dullness, anorexia, vomiting, cough, and ataxia.³ When CO levels become too high both humans and dogs can lapse into coma and eventually death.

Our proposal is a role-play scenario using standardized human and canine patients. Robert Santiago is a 63-year-old veteran who uses a service dog, Siri, a 6 year old female spayed Golden Retriever, for management of posttraumatic stress disorder (PTSD). Mr. Santiago has had recent financial trouble and was unable to pay his electric bill. The power is back on but his oil furnace is damaged and creating a CO leak. Mr. Santiago presents to the team at the Veterans Affairs Hospital for routine follow-up, and to refill his prescription for sertraline, which he takes to treat depression. He complains about being tired and nauseous for a few weeks. Mr. Santiago also visits a veterinarian and mentions that Siri has been sleeping a lot and is not eating well. He is worried she is depressed and asks the team for help.

References:

1. Weaver LK. Clinical practice: Carbon monoxide poisoning. *N Engl J Med*. 2009;360(12):1217-1225.
2. CDC. Carbon monoxide poisoning. Available at <http://www.cdc.gov.co/faqs.htm>.
3. Cornell University College of Veterinary Medicine. Consultant: A Diagnostic Support System for Veterinary Medicine. Available at http://www.vet.cornell.edu/consultant/Consult.asp?Fun=Cause_1423&spc=All&dxkw=carbon_monoxide&sxkw=&signs=.