Canine Dysautonomia: Uncommon & Fatal

A sporadic idiopathic disease affecting the autonomic nervous system, canine dysautonomia usually results in death or euthanasia. The cause is unknown, but living in a rural area is a recognized risk factor, and most cases occur in spring or autumn. Young animals (median age, 18 months) are generally affected. Four of 5 Havanese puppies in a single litter in the Kansas City, Missouri, area were diagnosed with canine dysautonomia. A fifth unaffected puppy was adopted minutes before the 4 affected puppies gained access to an area of patchy grass where 6 months earlier topsoil had been applied on a single occasion. Clinical signs developed 10-16 days later and included vomiting, crusty nares, difficulty in defecation and urination, absent anal tone, rhinorrhea, prolapsed third eyelid, and hindlimb ataxia. The dogs died or were euthanized 3 to 9 days after the onset of clinical signs, and the diagnosis was confirmed by morphologic confirmation of neuronal degeneration.

An additional, unrelated dog developed dysautonomia after contact with 1 of the affected puppies and was subsequently euthanized. No infectious or toxic agents were identified. The only common factor for the puppies was brief exposure to the soil; this possible exposure suggests a soil-borne toxin or infectious agent.

Commentary

The onset of signs in this case report was earlier than previously reported. Only 1 littermate, which did not get access to the outdoors, was unaffected. Does this suggest an environmental factor? Did the unrelated dog contract the disease from the Havanese puppy or before joining the new common household? The questions about this uncommon, fatal disease remain unanswered.
—Helena Rylander, DVM, DACVIM, DACVN

Source

Hull NC, O'Toole D, Miller MM, et al. Canine dysautonomia in a litter of Havanese puppies. *J Vet Diagn Invest*. 2015;27(5):627-631.

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