

VETERINARY VOICE: Tips of the Trade

Neurology- Polyradiculoneuritis (Coonhound Paralysis)

What is polyradiculoneuritis?

Acute Idiopathic Polyradiculoneuritis (a.k.a. Coonhound Paralysis) is an immune-mediated disease in hunting dogs that have been exposed to raccoon saliva. However, this condition has also been observed in dogs with no raccoon exposure. The ventral (motor) nerve roots and spinal nerves are primarily affected.

Clinical signs?

There is generally an ascending weakness that initially affects the pelvic limbs progressing to thoracic limb involvement within several days. Lower motor neuron signs are most commonly seen. These can include muscle atrophy and decreased to absent spinal reflexes. Skin hyperesthesia may occasionally be present and alterations in vocalization and respiratory paralysis may develop. Animals are usually normothermic and mentation, behavior, swallowing, defecation, urination and tail mobility are normal. Megaesophagus is not a feature of this disease.

Differentials?

Tick paralysis and botulism should be included as differential diagnoses. Coonhound Paralysis is suspected in the absence of ticks and lack of exposure to botulinum toxin.

Diagnosis?

CSF analysis is characterized by an increase in protein concentration and normal cell count. Results of electromyographic studies and nerve conduction velocities are useful adjuncts in the diagnosis of this condition.

Treatment? Prognosis?

The use of glucocorticosteroids in the treatment of Coonhound Paralysis is controversial. Supportive care consists of nursing, nutritional support, physical therapy to minimize muscle atrophy, and prevention of pneumonia, urinary tract infections and decubital ulcers. Most dogs regain adequate or normal neurological function within three to six weeks.

Questions?

Neurology Expert:

**Peter Gordon, DVM,
DACVIM (neurology)**

The Veterinary Specialty Center of Tucson has a board-certified surgeon neurologist available for questions and consultations on neurological conditions during the weekdays. He is also on call to provide consultations to VSCT emergency doctors and to perform emergency neurological surgery for patients. Board-certified neurologists have four additional years of training and are certified by the American College of Veterinary Internal Medicine to assure competency in advanced veterinary neurology and neurosurgery.