

Tick Paralysis in Dogs

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What is tick paralysis and how is it caused?

Tick paralysis is not a paralysis of the tick, but a paralysis in animals, which is caused by the tick. The females of the *Dermacentor variabilis*, *D. andersoni*, and *Ixodes holocyclus* (found in Australia) ticks secrete a toxin that affects the nervous system of mammals. It produces a flaccid (weak, with no muscular tone) paralysis. In some animals, only the hind limbs are affected. In others, the condition can ascend up the body and affect the front limbs and sometimes even the muscles required for respiration.

What are the signs of tick paralysis?

The signs of paralysis generally start 5-7 days after the ticks start feeding (it usually takes multiple ticks feeding simultaneously to elicit the paralysis). The first signs are weakness and incoordination in the hind legs. Several hours after the signs in the hind limbs start, the front legs are affected and soon the animal can not move any of his legs. Difficulty with breathing, chewing, and swallowing can be seen. The animal generally has no fever. Death can occur within hours from respiratory failure due to paralysis of the muscles necessary for respiration.

How is tick paralysis diagnosed?

The diagnosis is based on the sudden onset of paralysis, the rapid worsening of the condition, the season of the year, presence of ticks, and rapid recovery when the ticks are removed.

What is the treatment for tick paralysis?

The treatment for tick paralysis is basic - [Remove the Ticks](#). Most animals will quickly recover. If an animal is severely affected, supportive care and artificial respiration may be needed. There is an antitoxin that can be given if it is available and can be procured quickly.

Not all ticks carry this toxin and not all dogs are affected, hence the disease is only occasionally seen. Cats appear resistant to the toxin.