Preventing Complaints in Cases of Tick Paralysis

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Veterinarians struggle with managing tick paralysis cases, not only because it is a severe and unpredictable disease process, but also because there is significant variation in its management across different veterinary practices and scant practical literature for reference. Professional complaints can be exacerbated because it is common for clients to receive conflicting advice from second opinions and referral practices. The impact on individual veterinarians, and our collective professional reputation, is significant.

The purpose of this article is to reduce Veterinary Surgeons Board complaints stemming from tick paralysis cases. This can be achieved by adopting consensus guidelines for tick paralysis treatment, providing detailed information to owners, practicing defensive medicine, and documenting every treatment and client communication.

My first recommendation is to review the consensus guidelines for management of tick paralysis (*Australian Tick Paralysis of Dogs and Cats: A Guide to Diagnosis, Management, Treatment and Prevention*), and adopt them to your individual practice environment.

The guidelines were developed by a panel of 16 veterinarians from diverse professional backgrounds representing industry, academia, private practice, emergency and specialist practice. A modified CODM (consensus-oriented decision-making) model was used to examine a series of questions regarding the prevention and management of tick paralysis and to evaluate the evidence for and against various clinical procedures involved in the management of cases of tick paralysis. For many questions, the highest level of evidence was expert opinion, but the experience of the panel members and transparent process meant that the guidelines reflect the current state of tick paralysis management in Australia. These guidelines are a reasonable benchmark for appropriate treatment of cases of tick paralysis, and can be used in defence of a professional complaint.

The following are the most common professional complaints regarding tick paralysis patient management.

1. The veterinarian misdiagnosed tick paralysis
2. The veterinarian failed to find an additional tick
3. My pet died unattended overnight

Robust operating procedures can minimise their occurrence.

Documentation

Clinical records are essential in the defence of any professional complaint, and are especially important where controversial decisions are made based on financial limitations of clients, or in extenuating circumstances. The records should be made as close to the time of

treatment as possible, and veterinary surgeons board guidelines for record keeping should be followed to the letter. Of particular importance are the following:

'Tick Paralysis' should be included on a written differential diagnosis list wherever it is a possible cause of clinical signs.

Owner information should be provided which clearly states the potentially fatal, and unpredictable nature of the disease.

Each tick search should be recorded

The decision of whether to clip the coat or not, and reasons for/against it needs to be recorded

Record all owner communication, especially when referral is offered or declined, coat clipping is declined, and if additional supportive care is declined. Importantly, if you decide not to offer referral for any reason, record the decision-making process as well.

Establishing a diagnosis

Conditions I have misdiagnosed in patients whose clinical signs were later found to be caused by tick paralysis include:

Gastritis, gastroenteritis, pancreatitis, gastric dilation, pneumonia, pulmonary oedema, meningitis, arthritis, hip dysplasia, and snake bite.

As one of the most common diseases on the eastern seaboard, tick paralysis is a likely cause of almost any acute, unexplained illness. The most common reason for misdiagnosis is that it is not even suspected, because the early clinical signs are not suggestive of lower motor neurone paralysis. The best way to avoid this is to include tick paralysis on all differential diagnosis lists for patients presenting with changes to:

Respiratory rate or effort
Gastro-intestinal abnormalities (vomiting or regurgitation)
Neuromuscular abnormalities (changes to gait, ataxia, lameness)

Common things occur commonly, and an unusual presentation of tick paralysis often accounts for mysterious acute illnesses. If tick paralysis is on the differential list it can be investigated by tick searching/clipping, before more invasive diagnostic tests or treatment are conducted.

Tick searches/clipping the coat/application of acaracide

Tick searching should be conducted frequently by as many staff members as possible. There are further details in the consensus guidelines. Document all tick searches. Remind owners that it is **impossible** to locate every tick, every time, and remember this when your neighbouring practitioner misses a tick!

Coat clipping is more controversial. Whether you decide to clip the coat or not, document the reasons for your decision.

Acaracide application may improve killing of ticks which have been missed during coat searching or clipping. It is not recommended in lieu of either action. No tick control method has been evaluated in patients with existing tick paralysis. Any registered product can be considered as an adjunct to searching or clipping. Following are the treatments applied at my practices:
Isoxazolines Alfaxolaner (Nexguard), Flurolaner (Bravecto), and Sarolaner (Simparica), are highly effective in healthy dogs, but GI absorption of these drugs has not been evaluated in patients with tick paralysis. These products are recommended to dogs presenting without clinical signs, or very mild ataxia only.
Permethrin based products (Permoxin) can be applied to dogs at the time of coat clipping, both as an acaracide, and to improve the efficacy of the tick search by increasing contact between the person doing the bathing, and the animal.
Fipronil Spray (Frontline), or a Pyrethrin based product (Fidos Flea Rinse) can be used after searching/ coat clipping in cats.

Appropriate supportive care

Tick paralysis treatment consists of removing embedded ticks and administration of tick anti-serum. Every other part of treatment should be considered 'supportive care', and tailored to the individual patient.

The tick consensus guidelines contain an algorithm for escalation of supportive care which can be explained to clients and adopted to differing practice environments.

I recommend offering referral to a 24-hour hospital in cases with respiratory scores of C, and higher, wherever the client asks the question about overnight monitoring, and whenever you have concerns about progress of the case. Always warn owners of the potentially fatal consequences of even mild cases.

Copies of the consensus guidelines can be obtained by contacting your local BI representative or Boehringer Ingelheim Business Support on 1800 808 691 or businesssupport.australia@merial.com

I would like to thank BI for supporting The Australian Paralysis Tick Advisory Panel and developing the guidelines.