FELINE HYPERAESTHESIA SYNDROME – WHEN COULD THIS HAVE A NEUROLOGICAL CAUSE?

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Feline hyperaesthesia syndrome (FHS) is mainly characterized by pain in the lumbar area, tail chasing, unusual vocalization, flank and tail biting and even self-mutilation. This syndrome has been recognized since 1980, however the fully underlying mechanisms for this hyperaesthesia is not fully understood therefore the therapy is variable and some cats respond different to the same medication. Some of the clinical signs reported in FHS have been associated with dermatological (skin allergies), orthopaedic, behavioural or neurological conditions (meningomielitis, intervertebral disc diseases or even epileptic activity caused by encephalitis/brain neoplasms). Tail mutilation has also been associated to prior trauma to the tail and some authors consider this clinical sign to be unrelated to the FHS and more associated to neuropathic pain.

Some of these patients are treated with anti-inflammatory medications (such as prednisolone, meloxicam), adjuvant analgesics for neuropathic pain (as such gabapentin), behaviour-modifying medications (fluoxetine, paroxetine or clomipramine) or even antiepileptic medications such as levetiracetam or phenobarbital. Success with acupuncture has been demonstrated in animals with behavioural disorders, stereotypic behaviours, skin problems and pain, however further literature is needed to evaluate the use of acupuncture for feline hyperaesthesia syndrome in cats.

Based on the recent reported cases with extensive work up for brain disease and considering the lack of response using antiepileptic medication/s, it is suggested that this syndrome is unlikely to represent a from of epileptic activity and therefore antiepileptic medications should ideally be avoided.

When a cat presents with clinical signs compatible with FHS, it is important to fully assess the history in order to evaluate if there is any possible factor predisposing to anxiety/fear. It this is the case, it is important to firstly consider referring the patient to a behaviorist. If there are no known predisposing factors or a behavioural condition has been ruled out, dermatological conditions should be investigated. If the patient presents any clinical signs of orthopaedic disease, further evaluation of the musculoskeletal system should be performed.

So, when could this have a neurological cause? Some of the reported cases with FHS respond to gabapentin (10mg/kg every 8 hours), which could support the presence of neuropathic pain. It is important to first ruled out other disease that can cause similar clinical signs [myopathies, nerve root involvement (foraminal intervertebral disc extrusion/protrusion)]

Unfortunately there is not any test that can confirm a final diagnosis of Feline Hyperaesthesia Syndrome, and different trial treatment have been suggested (gabapentin, pregabalin, cyclosporine, amitriptyline, fluoxetine, carnitine/coenzyme Q10 and prednisolone)

The prognosis depends if an underlying cause have been identified, the severity of the episodes and the respond to the trial medication. In a recent study with 8 cats, six cases achieved clinical improvement and even 5 had remission of the clinical signs when treatment with gabapentin alone (2 cats) or a combination of gabapentin, amitriptyline, and prednisolone.

It is also important to consider another syndrome characterized by pain and behavioural abnormalities: *Feline orofacial pain syndrome (FOPS)*. FOPS is a pain disorder characterised by acute behavioural signs of oral discomfort with or without tongue mutilation, which is prevalent in Burmese cats, but any breed, sex and age can be affected. It has been hypostasized to be analogous to trigeminal neuralgia in
humans. The clinical signs include paroxysmal events of acute onset of exaggerated licking, chewing movement and pawing at the mouth, usually confined to one side of the oral cavity and lips. The events last from 5 minutes to 2 hours and the cat can usually be distracted from it. Neurological examination is unremarkable, including the motor and sensory component of the trigeminal nerve. Ruling out any possible cause of oral pain or trigeminal nerve dysfunction makes the diagnosis, however oral lesions and environmental stress can precipitate these episodes. Some cats can be resistant to traditional analgesics including gabapentin. Adjuvant anticonvulsant medications (phenobarbitone) may be needed to control the allodynia effect and environmental stress should be limited. Occasionally life-long therapy is required however remission has been reported in up to 45% of the affected cats.

References:


