

## FOCUS

# Hippocampal Necrosis

A 7-year-old cat was presented for a 3-day history of behavioral changes (eg, excessive vocalization, facial territorial marking, inappropriate urination) followed by salivation and focal seizures. At examination, the cat was agitated, hypersalivating, and pyrexia. It also had anisocoria. Treatment with cooling IV fluids and anticonvulsants was initiated, but the cat continued to deteriorate. MRI findings were compatible with hippocampal necrosis. Over the next 24 hours, the cat began to show improvement, but it then experienced an episode of

vomiting and aspiration of ingesta followed by cyanosis and cardiorespiratory arrest. Initial resuscitation was successful, but the owner declined continued care, and the patient died. Necropsy was grossly unremarkable except for hepatic tissue pallor. Histologic changes in the brain showed subacute degenerative encephalopathy involving the hippocampus, which is consistent with previous case reports of hippocampal necrosis. The cause of this disease in cats remains unknown.

## Commentary

The hippocampus is an area of the brain thought to be involved in processing sensory information and forming new memories. Feline hippocampal necrosis (FHN) is infrequently reported and carries a poor prognosis. Until MRI abnormalities were defined in 2008, most FHN diagnoses were made on postmortem exam-

ination of brain tissue from cats that died or were euthanized. In 2011, antemortem diagnosis via MRI and survival in a small number of cats with FHN was reported.<sup>1</sup> Perhaps now, with better antemortem diagnostic criteria, we are more likely to identify less severe cases and advance knowledge about this condition.—Julie Walker, DVM, DACVECC

## Reference

1. Pakozdy A, Gruber A, Kneissl S, Leschnik M, Halasz P, Thalhammer JG. Complex partial cluster seizures in cats with orofacial involvement. *J Feline Med Surg*. 2011;13(10):687-693.

## Source

Adagra C, Piripi SA. Hippocampal necrosis in a cat from Australia. *Case Reports in Veterinary Medicine*. 2014;2014. doi:10.1155/2014/306789

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