

Antacid Therapy in Cats with Chronic Kidney Disease

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In the Literature

Gould E, Klos J, Price J, Harris T, Vaden S, Tolbert MK. Retrospective analysis of the effect of acid-suppressant therapy on clinicopathologic parameters of cats with chronic kidney disease. *J Feline Med Surg.* 2018;20(6):520-527.

FROM THE PAGE ...

Administration of proton pump inhibitors (PPIs) has recently been demonstrated to be associated with an increased risk for development of chronic kidney disease (CKD) in humans.¹ Antacid use is common in veterinary medicine, and many patients are prescribed antacids without clear indication. Although a common practice among veterinarians, use of antacids to treat nonulcerative GI disease is not warranted.² Cats with CKD are thought to be at increased risk for GI ulceration; however, several recent studies have shown that these cats rarely develop ulcers and often have more neutral gastric pH than cats with normal kidney function.^{3,4} Despite this, many veterinarians continue to administer antacids to cats with CKD.⁵

This retrospective medical record review from 2 hospitals examined the effect of antacids in cats with CKD. Of the 89 cats included in the review, most (~70%) had IRIS stage 1 or 2 CKD. Antacid therapy (H₂-receptor antagonists and/or PPIs) was not found to result in a more rapid progression of kidney disease as compared with cats with CKD not receiving antacids. However, serum sodium concentration increased over time in cats that received a PPI. In addition, concurrent administration of a PPI and H₂-receptor antagonist resulted in decreased serum magnesium concentration in cats with IRIS stage 1 or 2 CKD.

... TO YOUR PATIENTS

Key pearls to put into practice:

1 Although use of PPIs was not associated with a changing rate of CKD progression, PPIs may play a role in electrolyte and bone-mineral metabolism. Because CKD has been demonstrated to negatively affect bone density in dogs,^{6,7} veterinarians should recognize that bone and mineral disorders might occur in CKD patients⁸ and be aware of potential negative consequences of PPI therapy.

2 Routine prophylactic use of antacids in patients with CKD is not indicated.² Their use should be reserved for patients with evidence of GI bleeding (eg, melena, iron deficiency) or esophagitis.

3 Twice-daily administration of a PPI is the most effective protocol for neutralizing gastric acid in cats with GI ulceration.⁹

References

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