

Vetsuisse Faculty, University of Bern, 2018

Julia Katrin Prümmer

Small Animal Clinic, Vetsuisse Faculty, University of Bern

kleintierklinik.dkv@vetsuisse.unibe.ch

**Prevalence of and factors associated with hyperlipasemia in critically-ill dogs
(2015-2017)**

Summary

Hyperlipasemia not associated with acute pancreatitis (AP) is frequently reported in critically ill people, but studies in dogs are lacking. In this retrospective cohort study, prevalence of and clinical factors associated with elevations in DGGR-lipase were evaluated in 1,360 critically ill dogs. A total of 1,144 dogs had admission DGGR-lipase activity within three-fold the upper reference limit and 216 dogs had activities above this limit, but only 95 dogs received a clinical diagnosis of AP. Conditions frequently associated with hyperlipasemia were renal and immune-mediated disorders, endocrinopathies, upper airway obstruction, and prior corticosteroid administration. During hospitalization, 23% of dogs showed significant increases in DGGR-lipase activity. This was associated with renal and immune-mediated disorders, urogenital tract infections and hemodialysis. Hyperlipasemia was associated with longer hospitalization and increased mortality. The sensitivity and specificity of this assay to predict canine pancreatic-specific lipase above a cut-off considered diagnostic for AP was 96.0% and 97.8%, respectively.

Data from the present study show that significant hyperlipasemia is frequent in critically ill dogs at admission and during hospitalization and may be associated with a variety of extra-pancreatic conditions and a negative outcome. A diagnosis of AP should therefore not be based on DGGR-lipase elevations alone.

Key words: Canine pancreatic-specific lipase, Dog, Lipase, Pancreatitis

Date, place: _____ Signature referent: _____