



Katharina Moser, DVM,
Erik Teske, DVM, PhD, Dip
ECVIM-CA,
Hon Memb ECVCP,
Wolf von Bomhard, DVM,
Dip ECVP,
Christian Stockhaus, DVM,
Dip ECVIM-CA

Small Animal Clinic Haar,
Keferloher Straße 25, 85540
Haar
Germany

moser.katharina@
gmail.com

RETROSPECTIVE EVALUATION OF CLINICAL, DIAGNOSTIC AND HISTOLOGICAL CHARACTERISTICS IN DOGS WITH LYMPHOCYTIC- PLASMOCYTIC ENTEROPATHY

Chronic enteropathies are a common cause for persistent or recurrent gastrointestinal symptoms in dogs. Recent studies showed contrasting results regarding the association between histology to clinical signs and serum biomarkers^(1,2). The objective of this retrospective study was to correlate the duodenal inflammatory and architectural changes with the clinical symptoms and diagnostic parameters in a large number of dogs.

Medical data of dogs presented to the Small Animal Clinic Haar between 2003-2014 with chronic gastrointestinal symptoms and evidence of intestinal lymphocytic-plasmocytic inflammation were retrieved. The canine inflammatory bowel disease activity index (CIBDAI) was used to assess the clinical symptoms. Serum albumin, cobalamin and folic acid concentrations were recorded. Every dog was assigned an ultrasonographic, endoscopic, histologic and cytologic inflammatory score. Furthermore the histological presence of lacteal dilation, villus stunting, crypt lesions, epithelial integrity and increased intraepithelial lymphocytes was evaluated.

270 dogs were retrospectively evaluated. No significant correlation was found between CIBDAI and ultrasonographic, endoscopic or duodenal inflammatory score. Dogs with lacteal dilation ($P=0,001$) and increased intraepithelial lymphocytes ($P=0,005$) had significantly higher CIBDAI scores compared to dogs without these changes. The endoscopic score correlated significantly with the histological inflammatory score. No correlation was found between CIBDAI and villous stunting and crypt lesions. Hypoalbuminemia and hypcobalaminemia correlated significantly with lymphangiectasia and increased intraepithelial lymphocytes.

We conclude that intraepithelial lymphocytes and lacteal dilation are the two histological features which influence clinical signs and blood parameter the most. Hypoalbuminemia correlated significantly with lacteal dilation, corresponding to results of other studies. The severity of inflammation in the lamina propria does not reflect the severity of clinical signs. Although some parameters showed a correlation, most of them seem to be independent and cannot be replaced one by another. Therefore every parameter contributes to the diagnostic work-up of dogs with chronic enteropathies.

References

1. Jergens AE, Schreiner CA, Frank DE, Niyo Y, Ahrens FE, Echersall PD, Benson TJ, Evans R. A scoring index for disease activity in canine inflammatory bowel disease. *J Vet Intern Med* 2003; 17: 291-297
2. Allenspach K, Wieland B, Gröne A, Gaschen F. Chronic enteropathies in dogs: evaluation of risk factors for negativ outcome. *J Vet Intern Med* 2007;21: 700-708