

## Protein-Losing Enteropathy Induced by 4 Different Etiologies

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**Signalment:** A Schnauzer (2-year-old, spayed female), a Cocker Spaniel (3-year-old, spayed female), a Shih-tzu (9-year-old, intact female), and a Yorkshire terrier (8-year-old, intact female) dogs were referred due to abdominal distention, diarrhea, anorexia, and weight loss. Physical examination, hematological examinations, radiography, ultrasonography, endoscopy were performed for diagnosis.

**Results:** On serum-chemical analysis, hypoproteinemia and hypoalbuminemia was revealed in all dogs. Based on radiographic and ultrasonographic findings, large circular mass which is connected with small intestine was detected in one dog (a Shih-tzu). One another dog (a Yorkshire terrier) revealed endoparasitic infection of small intestine. Other 2 dogs showed edema and erythema of the intestinal mucosa on endoscopy. There were histologic evidences of intestinal inflammation on each endoscopic biopsy specimens. As a result, each dog diagnosed protein-losing enteropathy induced by lymphocytic-plasmacytic enteritis, eosinophilic enteritis, ileocecal Leiomyoma, and endoparasitic infection. Moreover, inflammatory bowel disease cases showed positive results on anti-IgA immunohistopathological findings.

**Clinical relevance:** These cases were definitely diagnosed to protein-losing enteropathy induced by 4 different etiologies. Our clinical report demonstrated that the clinical & diagnostic imaging findings, endoscopic characteristics and histopathological & immunohistochemical findings.

**Key words:** protein-losing enteropathy, inflammatory bowel disease, dog

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