#### **CLINICAL STUDY**

# INVESTIGATION OF PROTEIN LOSING ENTEROPATHY IN YORKSHIRE TERRIERS



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Yorkshire Terriers (YT) are predisposed to development of protein-losing enteropathy (PLE). Intestinal pathology of YT-PLE typically includes lymphangiectasia and mucosal inflammation. We have recently observed that lesions involving the intestinal crypts, usually described as crypt cysts or abscesses are the dominant abnormality in YT-PLE. These lesions appear to contain proteinaceous debris and neutrophils, and may play a role in enteric protein loss and the poor outcome of many YT with PLE. We are prospectively investigating the etiopathogenesis of YT-PLE, exploring the mechanisms for development of crypt lesions, and their role in enteric protein loss.

#### How can you help?

We are seeking samples from Yorkshire Terriers that have a clinical and histological diagnosis consistent with PLE.

- Inclusion criteria:
  - 1. YT of any age or sex that have undergone clinical investigation resulting in diagnosis of PLE.
  - 2. Hypoproteinemia (of any severity) that has been localized to the GI tract (i.e. no evidence of PLN or hepatic dysfunction).
  - 3. Evidence of GI disease on histology of small intestinal biopsies (endoscopic or surgical), for example: lacteal dilation, lymphangiectasia, mucosal inflammation, crypt abscessation or dilation.

From these dogs, we would like to receive:

- i. DNA (3-5 mls EDTA blood)
- ii. Serum (1-2 mls)
- iii. Clinical history and response to treatment
- iv. Histopathology report of their intestinal biopsies
- v. Pedigree information (if available)
- vi. 3-5 recuts of their GI biopsies from your histology lab (if possible).
- We also require DNA samples (3-5 mls EDTA blood) from unaffected YTs, i.e. with normal serum proteins and no history of GI disease (normal intestinal biopsies would also be very useful if available).
- If you are currently working up a Yorkshire Terrier with GI signs (with or without hypoproteinemia), and are planning intestinal biopsy, we would really like to receive

additional biopsy samples and DNA if possible (please contact us in advance for sampling tubes).

• If you are working up a PLE case in a non-Yorkshire Terrier breed, we would also be interested in receiving biopsy samples and DNA (please contact us for sampling tubes).

For further information and for sampling tubes, please contact:

Kenneth W Simpson, kws5@cornell.edu, tel: 607-253-3567

### THANK YOU!

## **UPDATE:**

Our research on GRANULOMATOUS COLITIS, or HISTIOCYTIC ULCERATIVE COLITIS IN BOXER DOGS is continuing and we would like to receive colon biopsies, DNA (5mls EDTA) and serum (5mls red top) from affected dogs. We also seek EDTA and serum samples from healthy Boxer dogs (no GI history), over 6 years of age. Contact Dr. Simpson for sampling tubes and further info.