## HISTIOCYTIC ULCERATIVE COLITIS IN BOXER DOGS

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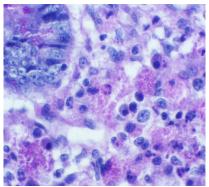
Dr Kenny Simpson and colleagues at Cornell University are currently undertaking research into histiocytic ulcerative colitis (HUC - also known as granulomatous colitis). HUC is a chronic, severe gastrointestinal disease of unknown etiology, typically seen in young Boxer dogs. Affected dogs usually present with signs of large bowel disease, initially frequent bloody mucoid stools, often progressing to chronic debilitation, weight loss, anemia, and hypoalbuminemia. Clinical signs are often unresponsive to immunosuppressive therapy, and recent work strongly suggests a defect in host defense which is linked to bacterial invasion and inflammation.<sup>1,2</sup>



Emaciated young Boxer dog affected with HUC



Endoscopic appearance of inflamed and ulcerated colonic mucosa



Characteristic histiocytic inflammation with PAS+ macrophages

We are collecting samples from affected Boxer dogs, in order to try and identify genes that may be associated with HUC. If you are treating any affected dogs and may be able to assist us by collecting samples, we would really appreciate your help! Patients that would be suitable for inclusion are Boxer dogs of any age or sex in whom a definitive diagnosis of HUC has been made, i.e. a diagnostic histopathology report describing histiocytic ulcerative colitis with PAS+ macrophages. The samples that we need are:

- 1. DNA: 5mls of EDTA blood.
- 2. **Serum**: (red top tube, 2 mls, ideally separated serum) to look for aberrant immune responses to bacteria.
- 3. Pedigree information and DNA/serum samples from affected parents and siblings would also be very helpful where available (not essential).
- 4. If you are performing endoscopy in a potentially affected Boxer dog, and in a position to also send endoscopic colonic biopsies that would be really helpful (please contact us for collection conditions).

Sample submission forms and contact details may be obtained at the following link, or by contacting: Dr. Kenneth W. Simpson, email: kws5@cornell.edu tel: 607-253-3567.

<sup>&</sup>lt;sup>1</sup> Simpson KW et al. Adherent and invasive Escherichia coli is associated with granulomatous colitis in boxer dogs. Infection and Immunity 2006 Aug;74(8):4778-92.

<sup>2</sup> Hostutler, R. A. et al. 2004. Antibiotic-responsive histiocytic ulcerative colitis in 9 dogs. Journal of Veterinary Internal Medicine 18:499–504.

## HUC STUDY SAMPLE SUBMISSION FORM

SIMPSON GROUP, CORNELL UNIVERSITY

Checklist for patient suitability:

- 1. Boxer dog of any age or sex.
- 2. Confirmed diagnosis of HUC with available histopathology report.
- 3. Pedigree/sibling information is extremely helpful, although not essential.

Sample submitted:	EDTA 🗆	DNA kit□	Serum 🗌	Endoscopic biopsies		
Histopathology repor	rt enclosed? [	_ (we are una	ble to include s	amples witl	nout this)	
Case ID:			_ Sex: F□	M□	Neutered□	
Age:Submitting veterinarian:						
Tel:		Email:				
Address:						
Clinical signs:						
Response to treatment:						
American Kennel Club registered title (if available):						
Other known disease	s:					
Additional information (e.g. affected relatives - continue overleaf):						

Mailing address for samples: HUC STUDY, Simpson Laboratory, C2-006 VMC, Tower Road, Cornell University, Ithaca, New York 14853. For further information, please contact: Dr. Kenneth W. Simpson, email: kws5@cornell.edu tel: 607-253-3567.