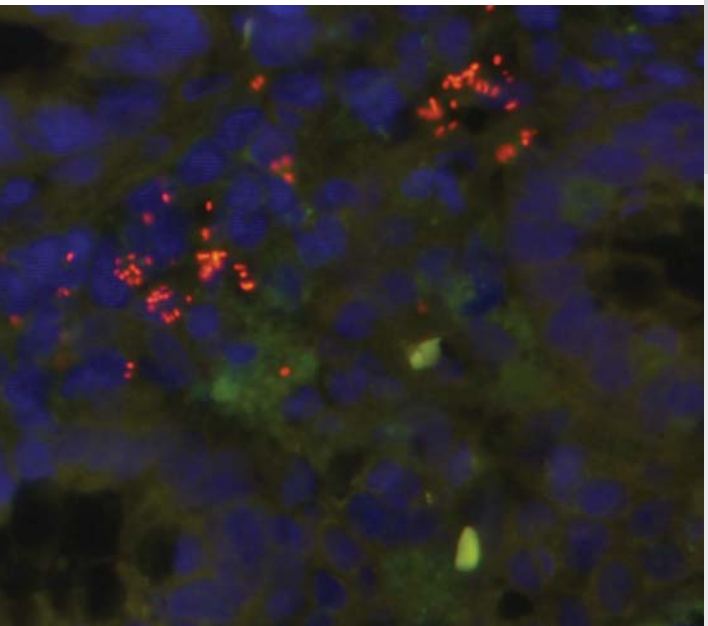
Endoscopic samples inform treatment

Briko, pictured on the cover, suffered with chronic bloody diarrhea for a full year. Initial efforts to control the situation included diet modifications and various drugs, none of which relieved Briko's condition. When he presented to CUHA, defecating seemed painful and he had progressively been losing weight. At Cornell, Briko had a colonoscopy, which revealed a thickened, irregular, inflamed colon. Endoscopic biopsies were characterized by severe chronic diffuse histiocytic, lymphoplasmacytic, and neutrophilic inflammation and ulceration. Fluorescent *in Situ* Hybridization techniques were used to look for invasive bacteria and revealed that Briko had granulomatous colitis associated with *E. coli*. *E. coli* was cultured from Briko's colon and antimicrobial susceptibility testing was performed to guide treatment. Although an uncommon type of inflammatory bowel disease, Granulomatous colitis associated with *E. coli* is most often encountered in young Boxers and French bull dogs, like Briko. Dogs with this disease require aggressive antimicrobial therapy for at least six weeks. Briko's colitis responded well to this treatment. Bacteria are increasingly implicated in inflammatory bowel disease and specialized techniques to enable their detection are available at Cornell (WWW.VET.CORNELL.EDU/LABS/SIMPSON).



A tailored approach to suit all cases

We choose the most suitable imaging technology for each patient. Portable endoscopes work well in the surgery room. Capsule endoscopy is a great option for pets that cannot be anesthetized safely, or in cases when you need to see the entire gut. It can't take tissue samples, but it can help determine the nature and severity of intestinal damage and whether further intervention is needed. It is likely to be particularly useful in investigating the source of gastrointestinal bleeding.

~ Dr. Kenneth Simpson, BVM&S, PhD
Professor of Internal Medicine & Gastroenterology
Diplomate of American College of Veterinary Internal Medicine & European College of Veterinary Internal Medicine

About CUHA

Part of the nation's top-ranked veterinary college, the Cornell University Hospital for Animals is home to more than 80 board-certified veterinarians in specialties ranging from anesthesiology to wildlife medicine and more than 75 licensed veterinary technicians who collaborate with each other and referring veterinarians and clients to heal patients. Every referral experience presents opportunities for developing improved treatment options, fueling scientific investigations that promote animal and human health, and advancing the veterinary profession.

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CORNELL UNIVERSITY HOSPITAL FOR ANIMALS

Endoscopy

When what's inside counts

Cornell University
College of Veterinary Medicine
Hospital for Animals

Sometimes, the key is inside ...

One of the least invasive ways to diagnose conditions affecting internal organs is with endoscopy. Without the aid of an endoscope, problems associated with the intestines, esophagus, stomach, and colon, for example, can only be diagnosed with exploratory surgery that requires anesthesia and the potential for extended recovery periods. Endoscopy can also be used to visualize and acquire samples from the trachea and upper lung bronchial passages. In some cases, foreign bodies which have been inhaled or ingested may also be removed with the endoscope, eliminating the need for surgery.

Veterinarians at the Cornell University Hospital for Animals have access to some of the finest endoscopy equipment available, including:

- Slimline large-channel endoscopes that allow our clinicians to pass specialized endoscopic instruments through endoscopes that are reduced in size for our smaller patients.
- Our new portable endoscopy system allows endoscopes to be attached to a laptop-sized processor and light source, providing easy maneuverability within the teaching hospital. This is particularly useful in surgery or for patients who cannot be moved to the endoscopy suite.
- Wireless capsule endoscopy provides high-quality imaging throughout the entire GI tract without requiring anesthesia. Each single-use "Endo Capsule" made by Olympus employs a tiny camera that takes pictures all the way through the digestive system and transmits data wirelessly to a receiver worn by the patient.

Endoscopies are handled through the Hospital's Small Animal Medicine section, with Dr. Kenneth Simpson coordinating this service. Please consult your veterinarian to discuss possible diagnostic testing through endoscopic procedures. To schedule an appointment through the endoscopy service, please call 607-253-3060.

Wireless capsule endoscopy enables non-invasive diagnosis ...

When Butch, an English bull dog, was referred to the Cornell University Hospital for Animals, the outlook was bleak. He was vomiting and regurgitating. He was lethargic and his temperature was elevated to 106.9. Presumptively diagnosed with gastrointestinal ulceration, Butch was admitted to CUHA's 24/7 emergency clinic, literally fighting for his life.

Once at Cornell, Butch was stabilized and transferred to the Internal Medicine Service where various tests were conducted. Butch had a tense and uncomfortable abdomen and continued to regurgitate. In-depth investigation found no definitive evidence of intestinal perforation so medical and supportive care was continued until Butch was stable enough to undergo endoscopy. The initial upper gastrointestinal endoscopy revealed moderate esophagitis, a diffusely thick stomach with multifocal punctate erosions, and more than 10 deep/severe ulcers at the opening of the duodenum (see picture on endoscopy screen at right). Butch received medication to help his ulcers and esophagitis heal and an endocapsule was administered to determine if his intestinal damage was resolving. The endocapsule revealed the duodenal ulcers had healed, and Butch was released to his owner's care.