



Research Communications of the 27th ECVIM-CA Congress

Intercontinental, Saint Julian's, Malta, 14th to 16th September 2017

ORAL RESEARCH COMMUNICATIONS

ESVIM – European Society of Veterinary Internal Medicine

Thursday 14 September

09.00–09.15	ESVIM-O-1	Cuq	Calibrated automated thrombography to evaluate thrombin generation in dogs with immune-mediated hemolytic anaemia
09.15–09.30	ESVIM-O-2	Dandrieux	Effect of immune-suppressive treatment on cytokine production in healthy dogs
09.30–09.45	ESVIM-O-3	Hansson-Hamlin	Identification of antinuclear antibodies in dogs using immunodiffusion

Friday 15 September

14.40–14.55	ESVIM-O-4	Brown	Short- and long-term morbidity and mortality in dogs and cats following cardiopulmonary arrest
14.55–15.10	ESVIM-O-6	Darcy	Feline primary erythrocytosis: a multicentre retrospective case series (18 cases)
15.10–15.25	ESVIM-O-7	Roels	Investigation of a fungal aetiology in canine idiopathic pulmonary fibrosis
15.25–15.40	ESVIM-O-8	Keegan	Clinical features of 70 cases of canine idiopathic eosinophilic lung disease
15.40–15.55	ESVIM-O-9	Keegan	Therapy and long-term follow-up of 70 cases of canine idiopathic eosinophilic lung disease
16.30–16.45	ESVIM-O-10	Vientos-Plotts	Development of respiratory dysbiosis as cats transition from healthy to asthmatic airways
16.45–17.00	ESVIM-O-11	Grobman	Documenting silent reflux and microaspiration events using nuclear scintigraphy in healthy dogs
17.00–17.15	ESVIM-O-12	Canonne	Diagnosis of pulmonary angiostrongylosis in dogs with negative non-invasive tests (Baermann analysis and AngioDetect™©)
17.15–17.30	ESVIM-O-13	Grobman	Discrimination between cough and non-cough behaviours using acoustic wave recordings
17.30–17.45	ESVIM-O-14	Robin	Tracheal stent in dogs: outcome prediction and owner satisfaction assessment
17.45–18.00	ESVIM-O-15	Stengel	Meticulous debridement as sole management for successful outcome in 6 dogs with sinonasal aspergillosis (SNA)

ESVC – European Society of Veterinary Cardiology

Thursday 14 September

14.25–14.40	ESVC-O-1	Vitt	Utility of VHS to predict echocardiographic EPIC Trial inclusion criteria in dogs with myxomatous mitral valve disease: A retrospective multicentre study
14.40–14.55	ESVC-O-2	Rocchi	Evaluation of continuous positive airway pressure in dogs with cardiogenic pulmonary oedema secondary to severe mitral valve disease
14.55–15.10	ESVC-O-3	Rishniw	Development of a simple algorithm for diagnosis of left-sided congestive heart failure in dogs with mitral valve disease
15.10–15.25	ESVC-O-4	Lee	Effects of treatment with thromboxane A2 synthase inhibitor on pulmonary hypertension: a pilot study

ESVONC_P_5	Clares Moral	Survival of dogs diagnosed with inflammatory mammary cancer treated with a multimodal therapy
ESVONC_P_6	Magalhães	Effect of radiation therapy on the treatment of intracranial tumours in dogs: meningioma and glioma
ESVONC_P_7	Thiemeyer	Ultrasound-guided fine-needle aspiration of the canine prostate - a useful sampling method for molecular biological analysis?
ESVONC_P_8	Elliott	Histiocytic sarcoma is over-represented in Miniature Schnauzers in the United Kingdom

SCH – Society of Comparative Hepatology

SCH_P_1	Menard	Validation of a blood score for non-invasive diagnosis of liver fibrosis in dogs
SCH_P_2	Tabar	Diagnostic value of paired serum bile acids in clinical practice in 484 samples

ESCG – European Society of Comparative Gastroenterology

ESCG_P_1	Hill	Factors affecting gastric mucosal barrier function in dogs
ESCG_P_2	Slovak	Evaluation of the Hemocult faecal occult blood test kit in cats
ESCG_P_3	Slovak	Faecal occult blood testing in a presumed healthy population of cats
ESCG_P_4	Xenoulis	Specificity of SNAP fPLTM for the diagnosis of pancreatitis in healthy cats and sick cats without clinical suspicion of pancreatitis
ESCG_P_6	Hugonnard	Metabolic and clinical follow-up of seven inappetent cats during enteral refeeding
ESCG_P_7	Hanifeh	S100A12 and myeloperoxidase as possible biomarkers for intestinal inflammation in dogs
ESCG_P_8	Jolivet	Fasting and postprandial variations of plasma TLI, cobalamin and folate concentration in healthy beagle dogs
ESCG_P_9	Ioannidi	Total serum magnesium and cobalamin concentration in 20 cats with inflammatory small bowel disease or small intestinal neoplasia
ESCG_P_10	Fabres	Megaesophagus associated with gastro-oesophageal junction neoplasia in dogs: 7 cases (2004-2016)
ESCG_P_11	Heilmann	Feasibility of measuring fecal calprotectin concentrations in dogs and cats by the fCAL [®] turbo immunoassay
ESCG_P_12	Watson	Clinical features of English Cocker Spaniels with chronic pancreatitis mimic human IgG4RD
ESCG_P_13	Caivano	Contrast-enhanced ultrasonography of the duodenum in dogs with inflammatory bowel disease: preliminary findings
ESCG_P_14	Hill	Utility of capsule endoscopy as a complement to traditional endoscopy
ESCG_P_15	Benvenuti	Serum protein profiling of 100 cats with inflammatory bowel disease and lymphoma

ESVE – European Society of Veterinary Endocrinology

ESVE_P_1	Burchell	Safety and efficacy of dapagliflozin, a novel antidiabetic drug, in healthy cats
ESVE_P_2	Langner	Evidence for regional variation of patient characteristics in dogs with hyperadrenocorticism
ESVE_P_3	Corsini	Symmetric dimethylarginine (SDMA) in hyperthyroid cats
ESVE_P_4	Schmicke	Low thyroxine concentrations after controlled feeding of bovine thyroid gland to dogs
ESVE_P_6	Lyngby	C-reactive protein in dogs diagnosed with hypoadrenocorticism
ESVE_P_7	García San José	Systemic hypertension in diabetic cats: does it really matters?
ESVE_P_8	Pérez Alenza	Systemic hypertension in dogs with diabetes mellitus
ESVE_P_9	Fowle	Canine electrolyte analysis in dogs with hypoadrenocorticism: a comparison of two in-house analysers with a reference laboratory
ESVE_P_10	van Bokhorst	Concurrent pituitary and adrenocortical tumors in dogs with spontaneous hypercortisolism
ESVE_P_11	González Sanz	Prevalence of neurological signs in hypothyroid dogs at diagnosis
ESVE_P_12	del Baldo	Evaluation of one portable blood glucose meter and one portable glucose-ketones meter in dogs

We sought to evaluate the feasibility of, and describe perfusion patterns of CEUS in the duodenum of dogs affected by IBD. We hypothesized that CEUS would demonstrate changes in the perfusion of inflamed duodenum and provide additional information in the diagnosis of canine IBD.

We prospectively enrolled seventeen dogs with IBD (based on Canine Inflammatory Bowel Disease Activity Index-CIBDAI, endoscopic evaluation and histopathological assessment of duodenal mucosa samples). Each dog was placed in left lateral recumbency and the cranial portion of the duodenum was imaged in a transversal plane. Before the endoscopy, each dog received two boluses (0.03–0.06 ml/kg IV) of contrast agent (SonoVue®, Bracco, Italy): first, while conscious and then after being anesthetized (using the same anesthetic protocol). Duodenal enhancement patterns were first evaluated qualitatively, then quantified using dedicated software (Qontrast®, Bracco, Italy).

In all dogs, the duodenal vascularization pattern was characterized by an initial rapid enhancement of the submucosal layer, followed by a gradual enhancement of the mucosa. Serosa and muscularis propria showed poor enhancement. We identified 2 patterns at peak enhancement: (i) complete enhancement of the submucosal and mucosal layers without subjective demarcation between the wall layers; (ii) incomplete enhancement of the mucosal layer that had a non-homogeneous, pointed, or streaked appearance. Dogs had similar perfusion patterns whether conscious or anesthetized. We quantitatively analyzed enhancement only in anesthetized dogs because of improved image quality. Analysis revealed a 50% reduced peak enhancement intensity, reduced regional blood flow and reduced regional blood volume in dogs with CIBDAI scores >6 ($n = 4$). These dogs all showed the non-homogeneous, pointed or streaked pattern. However, we found no relationship between perfusion patterns/parameters and endoscopic or histopathological findings.

Our study demonstrates that CEUS of the duodenum in dogs is feasible, and highlights the presence of different vascular patterns and contrast-enhancement features in dogs with IBD. Our findings showed some association with dogs that had higher clinical grades of IBD, but did not correlate with histopathological findings. Our study offers a novel, non-invasive imaging modality for the diagnosis and monitoring of canine IBD.

Disclosures: No disclosures to report.

ESCG – P – 14

UTILITY OF CAPSULE ENDOSCOPY AS A COMPLEMENT TO TRADITIONAL ENDOSCOPY. T.L. Hill¹, J. Pomrantz², J. Solomon². ¹University of Georgia, Athens, USA, ²Infiniti Medical LLC, Menlo Park, USA

Capsule endoscopy (CE) has a number of advantages over traditional endoscopy (TE): it allows for assessment of mucosal abnormalities of the entire gastrointestinal tract and can be performed in conscious dogs. CE has been described in dogs as a method to evaluate for gastrointestinal mucosal lesions. CE may be a valuable tool in reassessment of dogs that previously were evaluated by TE. This study describes the use of capsule endoscopy (CE) in dogs following traditional endoscopy (TE). Ten dogs were retrospectively identified that received CE within 6 months of TE (range 0–151 days). Seven dogs received CE for assessment of suspected gastrointestinal hemorrhage; CE detected gastrointestinal mucosal lesions in the stomach and jejunum ($n = 2$), diffusely throughout SI and colon ($n = 2$), jejunum ($n = 1$), ileum ($n = 1$), and colon ($n = 1$) that were not detected with TE. Three dogs received CE to assess lack of response to therapy in dogs with chronic enteropathy. In these dogs, CE detected persistent gastric erosions and duodenal mucosal changes seen previously with TE; in 2/3 dogs, CE also identified lesions in additional locations not seen with TE. CE detected gastrointestinal mucosal lesions not detected by TE in 9/10 dogs. Though further investigation is needed, CE appears to be a complementary and informative technique in the management of dogs with chronic GI signs that have undergone TE.

Disclosures: Disclosures to report

Jill Pomrantz is an employee of Infiniti Medical LLC. Jeff Solomon is an equity holder of Infiniti Medical LLC.

ESCG – P – 15

SERUM PROTEIN PROFILING OF 100 CATS WITH INFLAMMATORY BOWEL DISEASE AND LYMPHOMA. E. Benvenuti¹, E. Bottero², P. Ruggiero², A. Pierini¹, E. Magnanini¹, G. Lubas¹, V. Marchetti¹. ¹University of Pisa, San Piero A Grado, Pisa, Italy, ²Associazione Professionale Endovet, Rome, Italy

Inflammatory bowel disease (IBD) and lymphoma are common in middle-aged to older cats, associated with chronic vomiting, weight loss, and diarrhea, included in the chronic enteropathy (CE) disorder. In cats, hypoalbuminemia in CE is considered infrequent, but specific investigations about protein profile in these patients have been not published. The aim of this study was to evaluate serum protein profiling in cats with IBD and lymphoma, and to compare it with clinical symptoms, endoscopic assessments and histopathological diagnoses. FCEAI clinical index score, CBC, serum biochemical profile and urinalysis were evaluated in 100 cats affected by IBD and lymphoma. Endoscopy of upper and lower gastrointestinal tract was performed and a severity score from 0 to 3 was assigned based on WSAVA guidelines. Histopathological diagnosis was based on WSAVA guidelines. Total serum protein, serum protein agarose gel electrophoresis, and albumin-globulin ratio (A/G) were evaluated at time of diagnosis. Cats ranged from 1 to 17 years old (10 median), 46% were females and 93% were European shorthair. The histologic diagnosis was IBD (66%) and lymphoma (34%). The most common symptoms were vomiting (70%), weight loss (67%) and diarrhea (37%). Mean FCEAI score was 9.4 ± 2.59 . Mean serum total protein was 6.01 ± 0.99 g/dL. Low total protein (5.04 ± 0.63 g/dL) occurred in 41% of cats and only 10% had hypoalbuminemia. Beta globulins were decreased in 70% of cats, and gamma globulins were increased in 75%. A/G ratio was significantly higher in cats with hypoproteinemia (1.1 ± 0.3) compared to non-hypoproteinemic cats (0.9 ± 0.1). No statistical differences between protein profile and symptoms, FCEAI, gastrointestinal tract concerned, endoscopic score, type and severity of histologic pattern were found. Despite the hypoproteinemia was a relatively frequent finding in this work, a correlation with the clinical variables was not established. In addition, the clinical severity, the endoscopic and histological grading was not related to protein profile. Dysproteinemia with low beta globulin and high gamma globulin were the most common alterations. In hypoproteinemic cats A/G was higher than in non-hypoproteinemic cats. The decrease of beta globulin could be due to malnutrition but also to iron metabolism modifications occurring in chronic inflammatory disease, with reduction of transferrin and ferritin. Hypergammaglobulinemia is reported in human medicine as a common feature of IBD associated to extraintestinal manifestation. No data so far are available for the prevalence and clinical significance in cats.

Disclosures: No disclosures to report.

ESVC – P – 1

RELIABILITY OF VENA CONTRACTA FOR STAGING DEGENERATIVE CHRONIC MITRAL VALVE DISEASE IN DOGS. A. Caro-Vadillo¹, E. Pintado-Carretero², A. Casasúsolea³. ¹Complutense Veterinary School, MADRID, Spain, ²Centro Veterinario Asís, Alcazar De San Juan ^{CR}, Spain, ³Servicio Veterinario de Ecografía de Alejandro Casasús, Madrid, Spain

It is important to obtain an accurate quantification of mitral regurgitation severity. This fact is especially important in order to identify B2 patients -ACVIM classification- that can benefit from starting medication or to prevent congestive heart failure. The vena contracta is the narrowest portion of a jet downstream from the regurgitant orifice. The objective of the present study is to prove if the vena contracta could be used as criteria for classification in dogs with DCMVD. One hundred and thirteen dogs suffering from DCMVD in different phases according to ACVIM classification, have been included: B1, $n = 54$; B2, $n = 51$ and C, $n = 8$. The vena contracta was measured from the parasternal left apical four-chamber long axis view. Three measurements were obtained for each dog and the average was obtained. The results showed a statistically significant difference between stages for end-diastolic left ventricular index (EDVI), end-systolic left ventricular index (ESVI) and vena contracta (Kruskal-Wallis for independent