Occurrence of Hypertrophic Cardiomyopathy in a Large Cohort of British Shorthair Cats
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## ORAL PRESENTATIONS – Thursday, June 10

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<td>Cytokine and Matrix Metalloproteinase Expression in Blood Samples of Dogs With Congestive Heart Failure</td>
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<td>9:15 am</td>
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<td>Dennis Trafny</td>
<td>Cardiac Troponin-I Concentration is Elevated Pre and Post-Pacing in Dogs With Bradyarrhythmias: Is Myocarditis a Potential Etiology?</td>
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<td>Kristine Yee</td>
<td>Diagnostic Test Parameters in Cats With Heart Disease and their Correlation With NT-proANP, NT-proBNP and Troponin I Measurements</td>
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<td>Gemma Fraga Veloso</td>
<td>Expression of Urocortins in Canine Myocardium and Plasma Levels in Dogs With Cardiac Disease</td>
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<td><strong>BREAK</strong></td>
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<tr>
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<td>Dan Ohad</td>
<td>Is the Cardio-Renal-Anemia Syndrome Prevalent in Dogs?</td>
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<td>Andrea Lantis</td>
<td>Aldosterone Escape in Furosemide-Activated Circulating Renin-Angiotensin-Aldosterone System (RAAS) in Normal Dogs</td>
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<td>Melanie Hezzell</td>
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<td>Ian Jones</td>
<td>Flow Mediated Vasodilation in Canine Chronic Mitral Valve Disease</td>
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<td>9</td>
<td>Inge Tarnow</td>
<td>Congestive Heart Failure in Dogs is Associated With Enhanced Platelet-Leukocyte Aggregates - A Marker for Platelet Activation</td>
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<td>11:45 am</td>
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<td>Inge Tarnow</td>
<td>Thromboelastography in Dogs With Asymptomatic Myxomatous Mitral Valve Disease</td>
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<tr>
<td>12:00 pm</td>
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<td>Caroline Rasmussen</td>
<td>24-hour Electrocardiography in Clinical Healthy Cavalier King Charles Spaniels, Wire-Haired Dachshunds and Cairn Terriers</td>
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<td>12:15 pm</td>
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<td>Lisa Freeman</td>
<td>Development and Evaluation of a Quality of Life Questionnaire for Cats With Cardiac Disease</td>
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**SMALL ANIMAL – ONCOLOGY**

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<td>Luis Lembcke</td>
<td>Evaluation of Tyrosine Expression in Canine and Equine Melanocytic Tumors</td>
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<td>Rebecca Brown</td>
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<td>Courtney Mallett</td>
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<td>Shannon Parlitt</td>
<td>Radiosensitivity and Capacity for Radiation-Induced Sublethal Damage Repair of Canine Transitional Cell Carcinoma Cell Lines</td>
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<tr>
<td>10:30 am</td>
<td>17</td>
<td>Jeffrey Phillips</td>
<td>Genetics of Osteosarcoma in the Scottish Deerhound</td>
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<tr>
<td>10:45 am</td>
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<td>Masahiko Sato</td>
<td>Perfusion Method for Bone Marrow Cell Harvesting in Dogs</td>
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<tr>
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<td>Sandra Axiak</td>
<td>Immunodyfunction in Dogs With Lymphoma</td>
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Boldface type indicates ACVIM Resident Research Award eligibility. Presentation times are subject to change.
3:00 pm 170 Alexandra Rose
Causes, Usefulness of Clinical Investigations and Success of Antiemetic Therapy in Dogs Referred for Vomiting

3:15 pm 171 Fiona Tam
Safety and Palatability of Polyethylene Glycol 3350 as an Oral Laxative in Cats

3:30 pm 172 Lucie Goodwin
Evaluation of Hypercoagulability Using Thromboelastography (TEG) in Dogs With Protein Losing Enteropathy

3:45 pm 173 Dottie Laflamme
Comparison of Two Canned Diets Designed for the Management of Feline Diarrhea

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4:30 pm 174 Susanne Kilipinen
Determination of the Dosage Regimen of Tylosin in the Treatment of Canine Tylosin-Responsive Diarrhea

4:45 pm 175 Aarti Kathrani
CD11c Positive Dendritic Cells are Significantly Decreased in the Duodenum of Dogs With Inflammatory Bowel Disease

5:00 pm 176 Aarti Kathrani
Overdominant Single Nucleotide Polymorphisms in the Nucleotide Oligomerisation Domain Two (NOD2) Gene are Significantly Associated With Canine Inflammatory Bowel Disease

5:15 pm 177 Jan Suchodolski
Relationship of Mucosal Gene Expression to Microbiota Composition in Dogs With Inflammatory Bowel Disease

5:30 pm 178 Nashwa Waly
Measurement of IL-12 (p40, p35), IL-23p19 and IFN-gamma; mRNA in Duodenal Biopsies of Cats With Inflammatory Bowel Disease and Healthy Controls using Quantitative Reverse Transcripase Polymerase Chain Reaction (qRT-PCR)

5:45 pm 179 Melanie Craven
Mucosal Cytokine Profiling Reveals IL-6 Up-Regulation in Feline IBD and Alimentary Lymphoma

6:00 pm 180 Jevan Christie
Fecal Sensitivity as a Tool to Differentiate Between Non-Neoplastic and Neoplastic Spirocerca Lupi Nodules Using a Modified Centrifugal Flotation Method

POSTER PRESENTATIONS

On Display:
Thursday, June 10, 9:30 am - 4:30 pm; Friday, June 11, 9:30 am – 4:30 pm; Saturday, June 12, 9:30 am – 2:30 pm

Attended by Authors Eligible for ACVIM Resident Research Awards:
Thursday, June 10, 9:50 am – 10:30 am; Friday, June 11, 9:50 am – 10:30 am

Attended by ALL Authors – Wine & Cheese Reception:
Friday, June 11, 6:00 pm – 7:30 pm

# Presenting Author Abstract Title

SMALL ANIMAL – CARDIOLOGY

181 Maria Helena Larsson
Time-Domain Signal-Averaged Electrocardiogram in Healthy German Shepherd and Boxer Dogs

182 Maria Helena Larsson
Time Domain High-Resolution Electrocardiography in Boxer Dogs With Arrhythmogenic Right Ventricular Cardiomyopathy and Dilated Cardiomyopathy

183 Aparecido Camacho
Heart Rate Variability in Boxer Dogs With Arrhythmogenic Right Ventricular Cardiomyopathy

184 Denise Schwartz
Six Minute Walk Test Standardization for Dachshund, Poodle and Labrador Retriever Dogs

185 Aparecido Camacho
Effects of Treadmill Training Over Autonomic and Hemodynamic Functions in Healthy Dogs

186 Masashi Mizuno
Effects of Running on the Renin-Angiotensin-Aldosterone System in Dog

187 Sara Granström
Occurrence of Hypertrophic Cardiomyopathy in a Large Cohort of British Shorthair Cats

188 Aparecido Camacho
Clinical Characterization of Hypertensive Hypertrophic Cardiomyopathy in Dogs With Chronic Kidney Disease (CKD)

189 Aparecido Camacho
Heart Rate Variability in Dogs With Mitral Endocardiosis or Natural Morbidity Obesity

190 Carley Saelinger
Cimet-Tail Artifacts in Normal Dogs and Dogs With Cardiogenic Pulmonary Edema

191 Takashi Ebisawa
Clinical Usefulness of Measuring Plasma Atrial Natriuretic Peptide Concentrations for Assessing the Severity in Dogs With Degenerative Mitral Valve Disease

192 Pierre Menaut
Circulating Natriuretic Peptides Concentrations in Hyperthyroid Cats

193 Caryn Reynolds
Weekly Variability of Plasma NT-proBNP Measurements in Cats With and Without Heart Disease

194 Aliya Magee
Use of Abciximab to Determine Platelet Reactivity in Healthy Cats

195 Carolina Carlos Sampedrano
Effects of High Versus Normal Salt Diets on Cardiovascular Variables in Healthy Aged Cats: A 6-Month Study

196 Takeshi Mizuno
Relationship Between Prognosis and Immune Response in Dogs After Mitral Annuloplasty

197 Shigeki Yamano
Endogenous Erythropoietin Levels and Iron Utilization in Dogs With Degenerative Mitral Disease

198 Yoko Fuji
Prevalence of Right to Left Shunt Due to Patent Foramen Ovale Concurrent with Pulmonary Stenosis in Dogs

199 Meg Sleeper
Dobutamine Stress Testing in Portuguese Water Dogs with Juvenile Dilated Cardiomyopathy

200 Sabine Riesen
Pharmacokinetics of Oral Ibuprofen in Healthy Cats

201 Michael Katz
Thiamyl Anesthesia Reveals Predominant Role for the Central Mechanism of Respiratory Sinus Arrhythmia in the Dog

202 Lauren Calland
In-Hospital Electrocardiograph Versus 24-Hour Holter Monitor for Assessing Heart Rate in Dogs With Atrial Fibrillation

203 Ashley Saunders
Bradycardia in Dogs Requiring Pacemaker Implantation in Chagas Positive Dogs

SMALL ANIMAL – ONCOLOGY

204 Kensuke Nakamura
Contrast-Enhanced Ultrasonography With Sonazoid® for Characterization of Focal Splenic Lesions

205 Silvia Lucas
Evaluation of Oxidant/Antioxidant Total Status and Erythrocyte Antioxidant Defense in Cats With Lymphoma

206 Elizabeth Lechner
Oxidative Stress in Dogs With Lymphoma Before and After Administration of Doxorubicin: A Pilot Study
The conclusion of this study is that the BSH in our cohort had a high occurrence of HCM. Most affected cats presented with pronounced, diffuse hypertrophic changes affecting the IVS, LVFW and arterial system of the heart. Eleftheriadis et al. [4] observed that a higher percentage of BSH (65%) had HCM compared with other cats breeds (21%). In the present study, 4.9% of the BSH presented at the Small Animal Hospital for HCM screening in the period of April 2006–August 2009. All cats were examined by the same two trained ultrasonographers using a Vivid 7 ultrasonic system and a 10 MHz transducer in various anatomic areas.

Familial hypertrophic cardiomyopathy (HCM) has previously been described in British Shorthair cats (BSH), but until now, no reports have been published on how prevalent the disease is within this breed. The aim of this study was to assess the occurrence of HCM in a large cohort of BSH and to evaluate the effect of gender, weight and age as potential risk factors to presence of the disease.

The study was conducted as a prospective study including all BSH presented at the Small Animal Hospital for HCM screening in the period of April 2006–August 2009. All cats were examined by the same two trained ultrasonographers using a Vivid 7 ultrasonic system (GE Medical) with a 10 MHz phased array transducer. The measurements of the left ventricle were obtained by conventional 2D- and M-mode imaging of right parasternal long-axis and short-axis views. Diagnosis of HCM was based on an overall assessment of echocardiographic findings, but cats were classified as to have a concentric hypertrophy if the interventricular septum (IVS) thickness exceeded 0.5 cm. Male cats had a significantly higher occurrence of HCM (20.4%) compared with females (2.1%) (OR of 12.7 (95% CI 4.2–38.6) for male gender (p < 0.001). No effect of weight and age on presence of HCM could be identified. Eighteen of the HCM positive cats had diffuse, symmetric hypertrophy of the left ventricle, whereas 5 had an asymmetric or regional hypertrophy of the left ventricle and 7 had diffuse, symmetric hypertrophy of the entire left ventricle. HCM could be identified. Eighteen of the HCM positive cats had diffuse, symmetric hypertrophy of the left ventricle, whereas 5 had an asymmetric or regional hypertrophy of the left ventricle and 7 had diffuse, symmetric hypertrophy of the entire left ventricle. HCM could be identified. Eighteen of the HCM positive cats had diffuse, symmetric hypertrophy of the left ventricle, whereas 5 had an asymmetric or regional hypertrophy of the left ventricle and 7 had diffuse, symmetric hypertrophy of the entire left ventricle. The conclusion of this study is that the BSH in our cohort had a high occurrence of HCM. Most affected cats presented with pronounced, diffuse hypertrophic changes affecting the IVS, LVFW and papillary muscles. As in many other breeds, male gender predisposed to development of the disease.