

ABSTRACT

RESEARCH COMMUNICATIONS OF THE 32nd ECVIM-CA CONGRESS

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LIST OF ORAL RESEARCH COMMUNICATIONS**ESVC – European Society of Veterinary Cardiology**

Thursday 1 September

09.00-09.15	ESVC-O-1	Kurogochi	Long-term results of mitral valve repair with artificial chordae and annuloplasty in small-breed dogs
09.15-09.30	ESVC-O-2	Menciotti	Differences in mitral valve morphology between Cavalier King Charles Spaniels with mild mitral regurgitation and without mitral regurgitation.
09.30-09.45	ESVC-O-3	Silva	Analysis of pimobendan prescriptions in small breed dogs with myxomatous mitral valve disease using Electronic Health Records in Primary Care Veterinary Practices in the United Kingdom
09.45-10.00	ESVC-O-4	Pires	Routine echocardiography in healthy senior cats. How reliable are left ventricular wall measurements?
10.00-10.15	ESVC-O-5	Colpitts	Genes of inflammation and coagulation are activated in hearts from cats with hypertrophic cardiomyopathy
10.15-10.30	ESVC-O-6	den Toom	Genome wide association study of congenital pulmonic stenosis in French Bulldogs
11.20-11.35	ESVC-O-7	Franchini	Agreement between different 2-D transthoracic views and 3-D transthoracic echocardiography in identifying mitral valve prolapse in dogs
11.35-11.50	ESVC-O-8	Dutton	Aortic annular plane systolic excursion in cats with hypertrophic cardiomyopathy: 151 cases
11.50-12.05	ESVC-O-9	Zoia	An overview on the inflammatory and systemic fibrinolysis status in cats with heart disease stratified by the presence and type of congestive heart failure
12.05-12.20	ESVC-O-10	Van Renterghem	The impact of chronic right ventricular pressure overload on right and left heart morphology and function

(Continues)

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protein that is required for SSTR2 and DRD2 expression and signaling, was expressed in all CAs, indicating that these signaling pathways are potentially activated. Interestingly, DRD2 and SSTR2 expression levels were strongly correlated, highlighting the possibility of combined targeting of these receptor subtypes.

Disclosures

Disclosures to report, please report below

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ESVE-P-10 | ESVE - European Society of Veterinary Endocrinology

Laparoscopic versus open adrenalectomy in 70 dogs with functional or hormonally silent adrenal tumors

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Adrenalectomy is the treatment of choice in hormone-secreting adrenal tumors to reverse clinical signs associated with hormone excess and to avoid complications of uncontrolled tumor growth. Surgery is also indicated in hormonally silent adrenal tumors when malignancy is suspected. In recent years, laparoscopic adrenalectomy gained popularity, however, clinical studies on larger groups of dogs including their endocrine diagnoses and outcome are still scarce. In this retrospective study the hormone analyses, perioperative- and recurrence data of 70 dogs that underwent adrenalectomy by laparoscopy or laparotomy between 2008 and 2022 are described.

Diagnosis was based on history, clinical signs, endocrine testing including measurement of plasma endogenous ACTH, (nor)metanephrines and aldosterone concentrations, and advanced diagnostic imaging. Endocrine diagnoses were naturally occurring hypercortisolism (n=52), pheochromocytoma (n=8) and hormonally silent 'incidentalomas' (n=10). Median age at adrenalectomy was 10 years (range 5.8-13 years). Most dogs (n=55) were neutered (25 male, 30 female), 15 were intact (12 male, 3 female).

Laparoscopic adrenalectomy was performed in 45 dogs (median weight 13.9 kg, range 5.1-50.3) of which 3 cases were converted to laparotomy. In the remaining 25 dogs (median weight 18.0 kg, range 6.0-43.6) a laparotomy approach was used. Bilateral adrenalectomy was performed in 8/70 dogs (6 laparoscopic, 2 laparotomy). Based on preoperative imaging, median maximal adrenal tumor dimension was 2.4 (range 1.0-5.2) and 3.2 cm (range 1.6-9.9) in the laparoscopy and laparotomy group, respectively (p=0.029). Surgical time of laparoscopic and open adrenalectomy did not differ significantly (p=0.147 and p=0.102 for unilateral and bilateral cases, respectively). Histopathology of hormonally silent adrenal tumors revealed a cortical adenoma in 7/10, carcinoma in 2/10 and unspecified adrenocortical tumor in 1/10 dogs. Forty-three out of 45 dogs in the laparoscopy

group and 24/25 dogs in the laparotomy group survived to discharge. Median duration of hospitalization was shorter after laparoscopic (1 day, range 1-11) versus laparotomic unilateral adrenalectomy (2 days, range 1-4; p=0.012). Relapse, defined by recurrence of clinical signs of hypercortisolism or catecholamine-excess and/or regrowth of adrenal tumor or metastasis, was not different in the laparoscopy (7/43) versus laparotomy group (4/24; p=1.00).

This study shows a favorable outcome of laparoscopic adrenalectomy in dogs with various endocrinopathies due to adrenal tumors. Based on shorter hospitalization time and comparable long-term outcome in dogs treated with laparoscopic adrenalectomy, this is considered the preferred technique whenever clinically possible.

Disclosures

No disclosures to report

ESVE-P-11 | ESVE - European Society of Veterinary Endocrinology

Trilostane treatment for feline hypercortisolism: Latin America multicenter study, 43 cases (2012-2022)

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Spontaneous hypercortisolism (HC), or Cushing's syndrome, is a rare condition in cats (*Felis catus*). Feline HC is characterized by presence of diabetes mellitus (DM), with variable degrees of insulin resistance. Trilostane is a competitive 3- β hydroxysteroid dehydrogenase inhibitor with high safety and efficacy in canine HC. Large case series of feline HC and studies assessing the use of trilostane in cats are lacking. The aim of this study was to evaluate clinical features, clinicopathologic findings, diagnostic imaging, safety and efficacy of trilostane treatment in cats with HC. In this multicenter descriptive retrospective study, forty-three (n=43) client-owned cats were diagnosed with spontaneous HC. All cats received an initial lower dose of trilostane (0.3-2.9 mg/kg q12h, PO) than previously reported. Values were expressed as mean \pm SD or, median and range (p<0.05). Twenty-six cats were male (60%) and 17 were female (40%); mean age was 10.4 \pm 2.8 years; mean body weight was 5.3 \pm 1.5 kg. Thirty-six cats were domestic shorthairs, four Persian, two domestic longhairs and one Russian blue. Thirty-five of 43 (81%) cats had pituitary-dependent HC, whereas eight of 43 (19%) cats had adrenal-dependent HC (1/8 bilateral adrenal tumor). The mean initial and final dose of trilostane were 1.3 \pm 0.6 and 1.9 \pm 1.4 mg/kg q12h (p<0.01). Nineteen of 43 cases (44%) required an increase in the trilostane dose, 20 of 43 (47%) maintained the dose and four of 43 (9%) reduced the dose. Most cats (53%) had an improvement in the clinical signs after trilostane treatment. Thirty-four of 43 (79%) cats had concurrent DM. The mean initial and final dose of insulin were 0.5 \pm 0.4 and 0.6 \pm 0.6 IU/kg q12h (p<0.4). Sixteen of 34 cases (47%) improved the diabetic control, nine cases (26%) required a reduction in insulin dose and five cases (15%)

achieved diabetic remission after trilostane treatment. Adverse effects were observed in 19% of cases, and included: reduced appetite (3/43), diarrhea (2/43), vomiting (2/43), neurological signs (1/43), and increased libido (1/43). Six of 34 cats (18%) had plantigrade stance. The most common complications were: chronic kidney disease (13/43) and pancreatitis (5/43). The median survival time was 657 days (60-2555). This is the largest study to date to describe cases of feline HC. This study shows that low-doses of trilostane could improve clinical signs of HC and DM control in 53% and 47% cases, respectively. In addition, trilostane treatment allows remission of DM in 15% of diabetic cats with HC.

Disclosures

No disclosures to report

ESVCN-P-1 | ESVCN - European society of Veterinary & Comparative Nutrition

The perception of Portuguese pet owners about veterinary approach to nutrition and weight management in companion animals

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Obesity numbers in humans and pets keep rising. While it is easy to consider the owner as the main influencer for obesity in dogs and cats, it is also important to evaluate the performance of veterinary teams and the owners' perception of this. This study aims to assess the impression of Portuguese pet owners about how the veterinary community approaches nutrition and weight management in pets.

An observational cross sectional survey developed for pet owners was implemented on waiting rooms of Portuguese veterinary practices. The study comprised 21 questions covering good practices in nutrition by veterinarians, advice from clinicians on diet and exercise, and whether clients were aware of the existence of weight management programmes and if they would consider this service if their pet was overweight.

A total of 432 answers were obtained from 292 (68%) veterinary hospitals and 140 (32%) clinics. Based on the recommendations of WSAVA and AAHA Nutritional and Weight Management Guidelines, it was observed that 93% of the animals were always or frequently weighed in consultation. However, the body condition score was only 49% routinely evaluated and a nutritional assessment was regularly performed in just 27% of the cases. Nevertheless, 97% of the pet owners surveyed, wanted their veterinarian to make a food recommendation and 92% a physical exercise plan. The majority (93%) of pet owners agreed that veterinarians have warned them about the risk of obesity in pets, mainly in paediatric visits or at the time of spay/neuter surgery. However, 65% of the respondents were unaware of the existence of weight management programmes for pets, and only 9% of the remaining mentioned that this service existed in the practice they visit. Lastly, a total of 82% of pet owners admit that if their animal was overweight they would resort to the help of this health service.

This study supports that pet owners are being informed by their veterinarians about obesity in pets. However, procedures like body condition score and nutritional assessment, which are needed to manage overweight animals, are not being performed often enough. Most owners reinforce the need of food and physical exercise recommendations by clinicians. Although veterinarians acknowledge that about half of the animals they observe are overweight, the majority of the respondents were not aware of the existence of weight management programmes, which raises the question if obesity is being properly managed.

Disclosures

Disclosures to report, please report below

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ESVCN-P-2 | ESVCN - European society of Veterinary & Comparative Nutrition

Different starch to protein ratios in kibble diets fed ad libitum on body weight control, body composition, water turnover and physical activity in neutered cats living in homes

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The intake of diets with different starch to protein ratios was compared in neutered cats housed in homes. Male (M) and female (F), obese (OB) and non-obese (NO) client owned cats were fed *ad libitum* for four months kibble diets high in starch (HS: Starch 40%, protein 38%; on dry matter basis) or high in protein (HP: Starch 20%, protein 52%), in a *cross-over* design. Physical activity was evaluated with an accelerometer fixed to chest collar previously adapted to cats, and body composition (BC), energy expenditure (EE) and water turnover (WT) were evaluated by the doubly labeled water method. Results were compared in a 2 diets x 2 sex x 2 body conditions factorial arrangement, totally 8 treatments, and submitted to variance analysis, Tukey test and Pearson correlation ($P \leq 0.05$ as significant; $P \leq 0.10$ as trend). A total of 30 cats, belonged to 23 owners finished the project: F-NO with 2.9 ± 2.1 years ($n=9$); F-OB with 4.2 ± 1.6 years ($n=7$); M-NO with 2.0 ± 1.1 years ($n=9$); M-OB with 4.5 ± 2.6 years ($n=5$). The mean age of the groups differed ($P < 0.05$), and then age was used in the statistical analysis as a co-variate. Cats fed HS diet maintained a constant body weight (BW) along the 4 months of diet intake ($P > 0.05$). However, the lean mass (LM) tended to reduce in F-OB ($P=0.07$), which presented a numerically lower EE (324 ± 7 kJ/kg^{0.67}/day) than the other groups. This may limited food and protein intake (6.84 ± 0.38 g of CP/kg^{0.67}/day), explaining the tendency of LM reduction. The intake of HP diet induced an increase on cats BW and LM ($P < 0.05$), but fat mass also increased 17% on F-NO ($P=0.04$) and tended to increase 7% in F-OB ($P=0.06$). The EE tended to be higher in M (351 ± 8 kJ/kg^{0.67}/day) than F (330 ± 8 ; $P=0.06$), was not affected