

No differences between Groups 1 versus groups 2 and 3 for FDPs and D-dimer were observed. Platelet count and AT concentrations were decreased in B-MM versus NB-MM ($P = 0.04$; $P = 0.026$); PT and aPTT and were increased in B-MM versus NB-MM ($P = 0.026$; $P = 0.03$). No differences between B-MM and NB-MM were observed for TT, FDPs, D-Dimer. B-MM dogs showed lower mortality rate in respect to NB-MM patient ($P < 0.028$). The TT resulted the best haemostatic analyte in predicting death in dogs affected with MM ($P < 0.04$; AUC 64%; 95% CI = 0.48–0.82).

Primary and secondary haemostasis are compromised in dogs with MM while tertiary haemostasis appears unaffected. The hypercoagulable state, opposite to humans, is unlikely in dogs with MM. Surprisingly, dogs with MM and clinical bleeding apparently have protective effect against death. The prediction of mortality in canine MM was related to TT.

Disclosures: No disclosures to report.

ESVCN – European Society of Veterinary Clinical Nutrition

ESVCN-P-1

A SURVEY ON THE BODY CONDITION SCORE MODEL FOR DOG TO CLINICAL VETERINARIANS AND DOG OWNERS. A. Koizumi¹, K. Aoyama², Y. Sugiyama¹, Y. Ota¹, K. Otsuji¹. ¹Teikyo University of Science, Tokyo, Japan, ²Royal Canine Japan, Tokyo, Japan

Body condition score (BCS) is a method that is commonly used in the diagnosis of nutritional status in small animals. However, clinical veterinarians recognize that BCS assessment has an error to some extent. This is because that BCS is an assessment of the subjective method based on ocular inspection and the palpation. Therefore we built a BCS model for the BCS assessment in dogs and examined its accuracy. We reported that variability of BCS value was less when the BCS model was used in nutritional assessment of the dog [1]. In this study, a survey was conducted to make clear usefulness of the BCS model in clinical veterinarians and dog owners.

The BCS model was developed with resin molded artificial ribs. Polychloroprene sponge sheet and natural rubber sheet were laminated to fit the palpation feeling of each BCS. A survey was carried out for both clinical veterinarians ($n = 23$) and dog owners ($n = 46$). The main questions were as follows: actual use of BCS in clinic, perception of using the BCS model and application of the BCS model in the clinic for clinical veterinarians, and awareness of the BCS and BCS assessment of own dog for dog owners.

Most of the clinical veterinarians used BCS for the nutritional assessment in dog. Many clinical veterinarians answered as follows: (i) palpation sensation between actual dog and the BCS model were consistent. (ii) description of nutritional status in dog to dog owner has become easier. On the other hand, most of the dog owners did not know the BCS. Many dog owners answered that the nutrition status of own dog could grasp using the BCS model.

The results suggest that the recognition of nutritional status for dog between veterinarian and dog owner matches by using the BCS model, as the result, this BCS model is a useful device to introduce weight loss program for obese dogs.

Disclosures: No disclosures to report.

Reference: 1. Otsuji K, Koizumi A, Mitsuhashi S, Kaneko T, Kobayashi N, Kobayashi T. Efficacy of the body condition score model in the nutritional diagnosis in dogs. ECVIM-ca Congress Lisboa Portugal Proceeding, p. 167, 2015

ESVCN-P-2

THE NEW BODY FAT INDEX CHART AS AN ALTERNATIVE, NON-INVASIVE METHOD TO ESTIMATE PERCENT BODY FAT COMPARED TO DEXA DURING WEIGHT LOSS AND WEIGHT MAINTENANCE IN OBESE CATS. I. Paetau-Robinson, C.A. Stiers, P.A. Burris. Hill's Pet Nutrition, Inc., Topeka, USA

Approximately 58% of cats in the United States are considered overweight or obese. Many pet owners struggle with reducing their cat's body weight. A critical component of a successful weight loss regimen is a good estimate of body composition as the starting point to calculate an appropriate food amount for weight loss. The newly developed method called the Body Fat Index (BFI) differentiates between levels of obesity and establishes a link between the BFI and an ideal body weight. Dual-Energy X-ray Absorptiometry (DEXA) provides the most accurate way of measuring percent body fat; however, it is not readily available to the general practitioner. The current study compares percent body fat determined from the BFI chart and DEXA scan for a group of obese cats during weight loss and weight maintenance fed a food specifically formulated for helping cats achieve a healthy weight containing 11 g protein, 3.5 g fat, 3.6 g insoluble fiber, 0.6 g soluble fiber, and 14.9 mg L-carnitine per 100 kilocalories. The protocol and procedures were approved by the institutional animal care and use committee.

Twelve obese cats were fed for weight loss until they achieved their ideal body weight (IBW), followed by a 6-month weight maintenance phase. All cats were group housed in rooms with natural light and access to sunrooms. Three animal care technicians independently determined the BFI for each cat once per month; an average BFI was calculated. The BFI Chart included images and descriptors that were used to determine the cat's percent body fat. The cats underwent a monthly DEXA scan during the weight loss phase and every two months during the weight maintenance phase.

The values for percent body fat determined by BFI and DEXA showed good correlation ($r = 0.70$) across a range of body weights and body fat of cats undergoing weight loss. The BFI slightly underestimated the percent body fat during the initial phase of the study but showed excellent agreement with DEXA results during the weight maintenance phase.

The purpose of this study was to evaluate the usefulness of the new BFI Risk Chart to repeatedly estimate percent body fat in overweight cats during weight loss and during a period of stable, normal body weight. The results show that the new method is an excellent tool for the determination of body fat when a DEXA instrument is not available and would be practical to use in the veterinary clinic.

Disclosures: Disclosures to report: The presenter and co-authors are employees of Hill's Pet Nutrition. The body fat index chart used in this study was developed by Hill's Pet Nutrition.

VBPS – Veterinary Blood Pressure Society

VBPS-P-1

COMPARISON OF HIGH-DEFINITION OSCILLOMETRIC AND WRIST BLOOD PRESSURE MONITORS FOR ARTERIAL BLOOD PRESSURE MEASUREMENTS IN DOGS. E. Martinelli¹, A.M. Zanaboni², R. Toschi Cornelian¹, R. Ferriani¹, C. Locatelli³. ¹San Francesco Veterinary Hospital, Milan, Italy, ²Computer Science Department, University of Milan, Milan, Italy, ³Department of Veterinary Medicine, University of Milan, Milan, Italy

Home blood pressure (BP) monitoring has a great potential to improve hypertension control in both human and dogs. The aim of this prospective study was to assess the level of agreement between the high-definition oscillometric method (vet HDO Monitor, S&B medVet GmbH) and a wrist blood pressure measuring device (WBP-DigiColor – Microlife Corporation) monitor in dogs.

This study was carried out between January 2016 and March 2016. Hospitalized dogs weighing more than 10 kg and aged over 7 months were recruited. All BP measurements were obtained according to the ACVIM (American College of Veterinary Internal

Medicine) consensus statement. Measurements were taken on the nondependent front leg with the dog placed in lateral recumbency. Cuffs of both oscillometric devices were placed on the proximal pelvic limb, just above the hock. Limb circumference was measured. The HDO's cuff provided by the manufacturer was selected according to the animal's limb circumference and to the manufacturer's instructions. Systolic and diastolic pressures were recorded for each device.

Statistical analysis was performed using IBM SPSS Statistics 20 (P value significant if <0.05). Data was examined using the Shapiro-wilk test of normality and the Bland-Altman method.

Good agreement was defined as a bias and limits of agreement (LOA) within 15 mmHg.

Twenty-three dogs (13 female and 10 male) were included among the eligible population (age 69.4 ± 57.1 months, weight 26.8 ± 9.0 kg, 15.6 ± 2.3 cm of limb circumference). Reasons for hospitalization included: ovariohysterectomy, neoplasia, gastroenteritis, spinal pathologies, hemolytic anemia and orthopedic surgery. Systolic pressure with HDO and WBP method was

150.0 ± 15.3 and 125.3 ± 11.4 mmHg respectively; diastolic pressure was 90.0 ± 16.4 and 79.7 ± 13.2 mmHg respectively. WBP monitor failed to measure BP in 4/23 dogs probably due to a non-appropriate limb's morphology. Correlation between HDO and WBP methods in dogs was moderate (systolic pressure $r = 0.47$, $P = 0.04$; diastolic pressure $r = 0.4$, $P > 0.05$). Systolic pressure agreement analysis demonstrated a bias of 22.3 mmHg and LAO 49.4 to -4.9 . Diastolic pressure agreement analysis demonstrated a bias of 9.1 mmHg and LAO 42.0 to -23.9 . Correlation between HDO-WBP agreement and limb circumference ($r = -0.46$, $P = 0.047$) was moderate.

In this study, we compared HDO with a human oscillometric device and found a lack of agreement between the 2 methods. In the authors' opinion, WBP monitor underestimates BP because of an inadequate size of the cuff. However, the authors believe that the lack of giant breeds and the small number of cases included in this study represents a great limit of their study.

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