

for age and trilostane use, subclinical group was associated with reduced risk of clinical outcomes (adjusted hazard ratio, 0.28; 95% confidence interval, 0.10–0.77).

The results of this study suggest that hypercortisolism in dogs includes subclinical PDH with an older age, lower post-ACTH stimulation cortisol, and lower risk of clinical outcomes compared to overt PDH.

### **EN25**

# Risk-Factors for Feline Hyperthyroidism in Southern Brazil: A Case-Control Study

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Hyperthyroidism is an elderly cats' frequent disease. Its prevalence has been increasing worldwide. Many evidences raised regarding hyperthyroidism risk-factors. By this way, those factors would have implications in the huge geographic prevalence variation observed. The objective of this study was to look for potential environmental variables associated with feline hyperthyroidism around Porto Alegre city, Southern Brazil. A 30-questions questionnaire was applied to 28 hyperthyroid feline owners as well as to 55 euthyroid (above 8 years of age) feline owners (n:m). Results of univariate analysis were expressed as odds ratio (OR) and respective 95% confidence interval (95%IC). Mean age of hyperthyroid cats was 13.2  $\pm$  2.7 years (range: 7-18), while euthyroid cats mean age was 11.6  $\pm$  2.4 years (range: 8-16) (P < 0.01). Age greater than 12 years was considered as a riskfactor (OR 3.14; 95%CI = 1.10 - 8.97), as well as canned foods exposure (OR 2.87; 95%CI = 1.10 - 7.50) as previously described. Bathing frequency showed an association between higher bathing frequency (weekly/monthly) and hyperthyroidism (OR 7.57; 95%CI = 1.41 -40.55). Other items surveyed, such as the use of plastic accessories, contact with domestic dust, use of endoparasiticides, ectoparasiticides, and vaccines, it was not possible to identify any association of these variables as risk or protective factors. Previous data suggest that bathing could have a protective effect cleaning off dust particles from the fur. The bath hypothesis as risk-factor needs further studies due to possible presence of endocrine disruptors linked with thyroid disfunction in cosmetic products.

### **EN26**

# Selegiline and Trilostane Association for Canine Pituitary-Dependent Hyperadrenocorticism: A Randomized Clinical Trial

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Canine pituitary-dependent hyperadrenocorticism (PDH) is a common endocrine disorder. Clinical management usually demands lifelong trilostane therapy, which may cause endogenous ACTH (eACTH)

elevation, adrenomegaly, and recurrent dosage adjustments. Selegiline therapy has been previously indicated for canine PDH treatment at the pituitary level, but not encouraged. However, there have been no studies associating trilostane and selegiline for PDH treatment in dogs. The aim of this work was to evaluate the clinicopathological features, imaging findings, and hormone test results in dogs with PDH treated with trilostane (Tri) or with trilostane and selegiline (Tri+Sel). Fifteen clientowned dogs diagnosed with spontaneous PDH were evaluated: eight were treated with Tri and seven with Tri+Sel in a randomized clinical trial. Dogs underwent clinical examination, serum biochemical analysis, urinalysis, abdominal ultrasound, and eACTH and post-ACTH cortisol measurements on treatment days zero (D0), 30 (D30), 90 (D90), and 180 (D180). Patients included in the Tri group were initially treated with trilostane at an initial dose of 0.5 mg/kg PO twice daily, whereas the Tri+Sel group initially received 0.5 mg/kg PO of trilostane twice daily and 1 mg/kg PO of selegiline once daily. There was no significant difference at the 95% confidence level in eACTH variation between the Tri group (median D0 = 20.85 pg/dL; median D180 = 79.0 pg/dL; p = 0.07) and the Tri+Sel group (median D0 = 103 pg/dL; median D180 = 98.25; p = 0.57). Both groups showed significant lower post-ACTH cortisol levels at the end of the study (Tri median D0 =  $15 \mu g/dL$ ; D180 = 5.2  $\mu$ g/dL; p = 0.002 vs. Tri+Sel median D0 = 17.23  $\mu$ g/dL; D180 = 2.26  $\mu$ g/dL; p = 0.006). Also, both groups needed trilostane dosage adjustments (p = 0.01). However, no statistical difference was observed between the groups at the end of the study regarding eACTH or post-ACTH cortisol levels. Nonetheless, there was minor variation in left adrenal gland thickness in the Tri+Sel group (left adrenal median D0 = 0.65 cm; median D180 = 0.71; p = 0.7) when compared with the Tri group (left adrenal median D0 = 0.77 cm; median D180 = 0.97 cm; p = 0.09). The same was observed for right adrenal gland thickness (Tri +Sel median D0 = 0.65 cm; median D180 = 0.58 cm; p = 0.2 vs. Tri median D0 = 0.58 cm; median D180 = 0.77 cm; p = 0.04). Moreover, patients in the Tri+Sel group seemed to have achieved better metabolic control throughout fructosamine and total cholesterol evaluation. Notwithstanding, no differences in clinical control or cognitive function status were perceived between the groups. The association of selegiline with trilostane seems to be a safe and promising complementary therapy for canine PDH. However, further studies with a larger sample size and longer follow-up are needed to clarify the actual effect of this association.

#### **EN27**

## **Urinary Tract Infection in Canine Hyperadrenocorticism**

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Occult urinary tract infection (UTI) is assumed as a common comorbidity in canine patients with hyperadrenocorticism (HAC), affecting up to 50% of cases at initial diagnosis. However, increased concern about