Allergen-Specific Immunotherapy with Allergoids in Canine Atopic Dermatitis Treatment
British Small Animal Veterinary Congress 2014
J.L. Gonzalez; Y. Moral
Hospital Clinico Veterinario, Facultad Veterinaria, Universidad Complutense de Madrid, Madrid, Spain

BACKGROUND
Allergoids are high molecular weight polymers produced by glutaraldehyde treatment of native allergenic extracts. They have reduced allergenicity but they maintain (or have increased) immunogenicity compared to native allergens. These properties allow administration of high doses in a short period of time. Allergoids have been successfully used to treat human allergy from more than 30 years.

MAIN OBJECTIVE
Assess safety and efficacy of allergen-specific immunotherapy (ASIT) using allergoids with a cluster administration scheme.

MATERIALS AND METHODS
Fifty-three dogs with canine atopic dermatitis (CAD) that met at least 5 of the Favrot criteria were recruited. Concomitant food allergy was ruled out through elimination diet for at least 8 weeks. Exclusion criteria were: oral glucocorticosteroids and/or antihistamines in the last 3 weeks, and depot glucocorticosteroids in the last 8 weeks before the diagnosis. Allergenic design of ASIT (VetGoid™; Alergovet-Inmunotek, Madrid, Spain) was made taking into account: results of intradermal (Allervet™ IDR; Alergovet, Madrid, Spain) and serological tests (specific IgE) (PET ELISA™; Alergovet, Madrid, Spain), the environment and veterinary criteria. Overall, environmental allergens from the main groups (pollens, mites, and moulds) were included in the study but never more than 5 different allergoids per treatment. The administration schedule of subcutaneous injections was: day 0: 0.2 mL, day 7: 0.5 mL (initial phase) and then one injection of 0.5 mL every 30 days thereafter (maintenance phase). Safety and efficacy were evaluated using a clinical questionnaire at 3, 6, 9 and 12 months after the first injection. Parameters recorded were: symptom and medication scores, subjective evaluation of the disease (veterinary and owner) and adverse reactions.

RESULTS
The study was completed by 49 of 53 patients. The average time for onset of improvement was 35 days. Maximum effect was reached around 2–3 months. Minimal side effects (increased itching) were observed in less than 2% of the animals. The efficacy results by group were: excellent (no signs and symptoms and no medication needed) in 44% of the animals, good (improvement in symptoms with occasional supportive medication) in 34%, moderate (improvement in symptoms, but continuous medication required with a dose reduction of at least 50%) in 14% and poor (no improvement) in 8%.

CONCLUSIONS
Allergoid-based ASIT is safe and effective for the treatment of CAD, demonstrating that it is an alternative in CAD etiologic treatment.

J.L. Gonzalez
Hospital Clinico Veterinario, Facultad Veterinaria
Universidad Complutense de Madrid
Madrid, Spain