

## Pilot trial of sublingual immunotherapy (SLIT) in mite-sensitive atopic dogs

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**Abstract:** Immunotherapy via sublingual administration of allergen (SLIT) is increasingly used for atopic disease in people. The goal of this study was to preliminarily evaluate the effectiveness of an established SLIT protocol, as used in human patients, in dogs with atopic dermatitis (AD). Ten mite-sensitive dogs with AD underwent a 6-month, open trial of SLIT. Treatment consisted of 0.1 ml allergen solution of increasing concentration, administered sublingually twice daily. Concurrently, all dogs were treated with decreasing-dose oral methylprednisolone for the first 15 days of SLIT; after this, clients administered the minimum amount of methylprednisolone necessary to keep their dog comfortable. Evaluations were performed at 0, 2, 4, and 6 months, including CADESI-03 scoring, pruritus visual analog scale (PVAS), and corticosteroid use. At 6 months, owner subjective evaluation indicated improvement in eight dogs, and no improvement in two dogs; the median improvement was 72.5%. Over the course of the study, median CADESI-03 scores declined from 76.5 to 59; median PVAS declined from 65 to 37 ( $P<0.02$  and  $P<0.01$  respectively; Wilcoxon signed-rank test). Mean methylprednisolone use from the first 2 months of the study to the final 2 months declined from 10.2 to 4.3 mg kg<sup>-1</sup> per 2 months ( $P<0.001$ , paired t-test); at 6 months, four dogs required no oral corticosteroid administration. Pre- and post-SLIT intradermal test scores for mite allergen varied markedly by patient; median results were not significantly different over time. We conclude that SLIT is a potentially useful therapy for canine AD and is deserving of further study.

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