

Allergen-reduction in dog fur after washing with a special allergen-reducing shampoo, as revealed with a standardized sampling method

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Conclusion

Dog allergic individuals that are constantly exposed to dogs are at risk to develop chronic allergic disease. Despite this, many allergic dog owners keep their dogs.

An in-house developed sampling method and following ELISA analysis proved beneficial in determining the concentration of dog allergen content in dog fur. Washing the dogs with a special allergen-reducing shampoo demonstrated efficiency in decreasing allergenicity of dogs by washing.

Introduction

Sensitization to dogs is a common cause of allergic symptoms, like rhinitis and asthma. Despite these afflictions, it is not uncommon that dog allergic persons keep their dogs. Due to this, an increase in demand for so called hypo-allergenic breeds has occurred, although there are no evidence to support the theory. On the contrary, earlier studies have demonstrated a greater variance in dog allergen Can f 1 levels between individual dogs than between breeds¹. Thus there is a need for evaluating each dog's allergen profile as well as finding efficient methods for reducing the allergen levels.

Material and methods

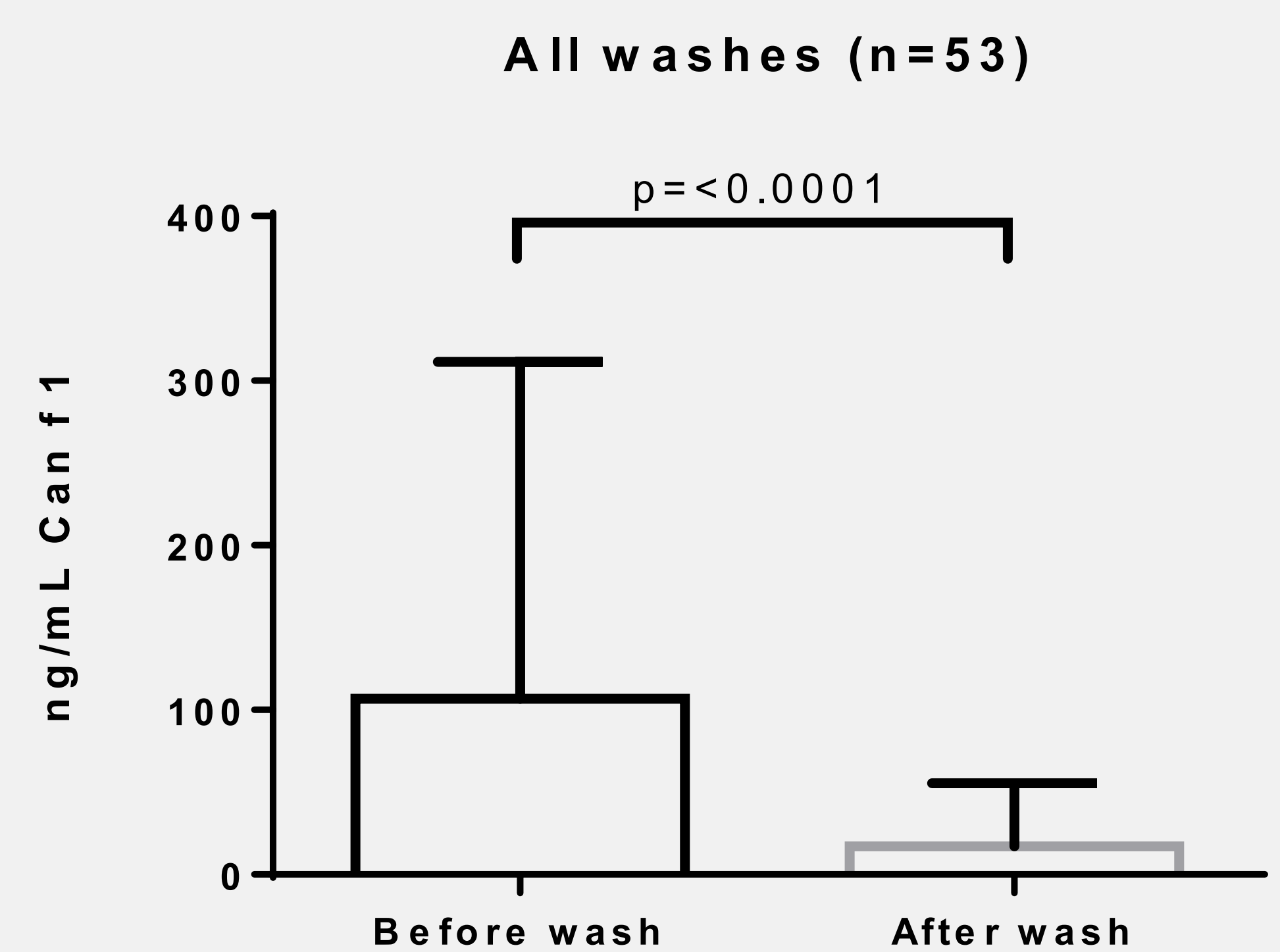
A method for sampling dog fur with a brush was developed and the samples analyzed in a validated ELISA for the dog allergen Can f 1. Twenty-one dogs were subjected to washes with a special allergen-reducing shampoo (Allergenius®), fur samples taken before and after washing.



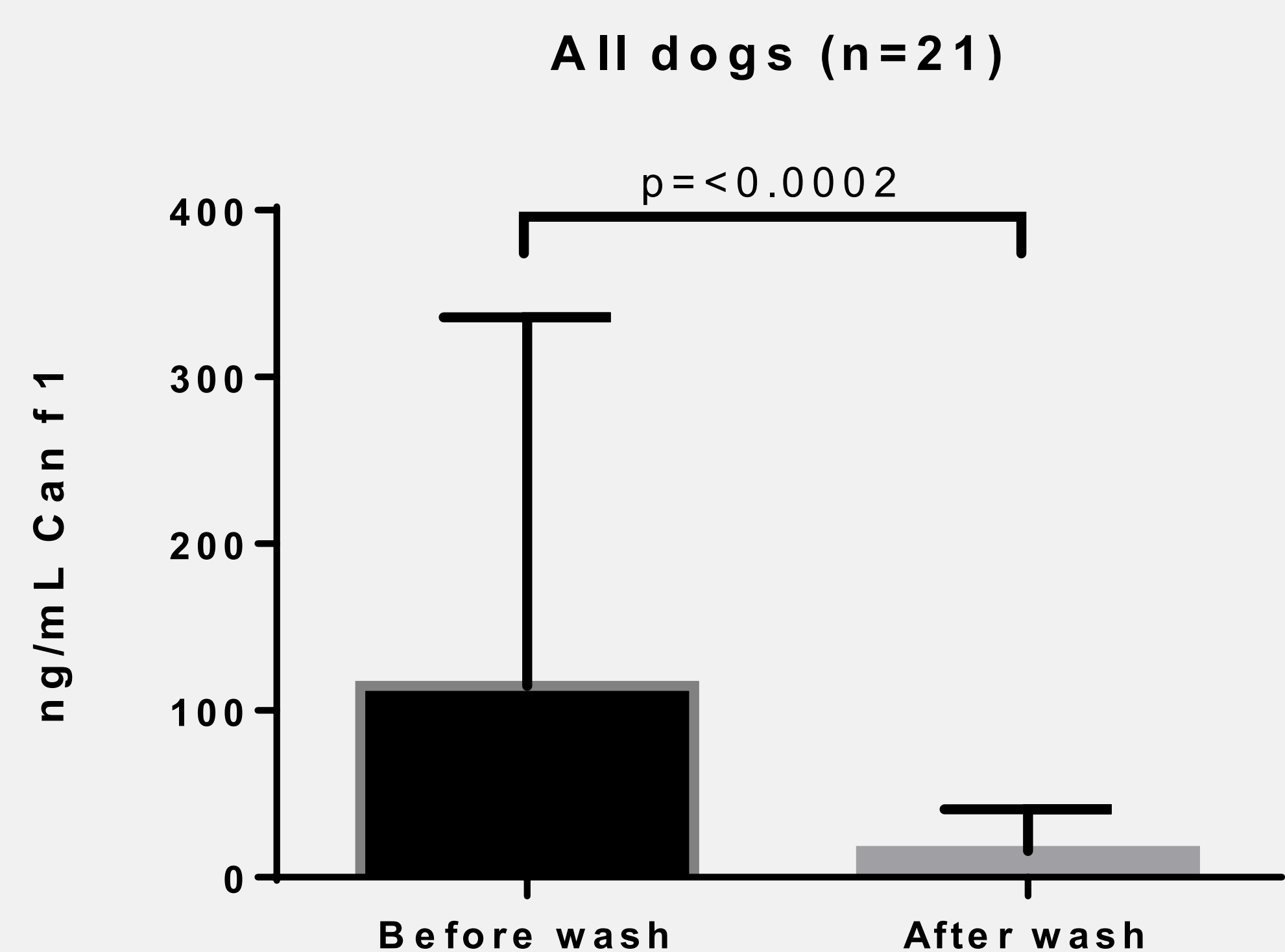
Aim

The aim of this study was to evaluate the effect of washing dogs with a special allergen-reducing shampoo using a validated in house Can f 1 ELISA and a standardized sampling method.

Results



Reduction of Can f 1 (ng/mL) in coat samples after dogs (n=21) were washed (n=53) with the special allergen-reducing shampoo.



Reduction of Can f 1 (ng/mL) for individual dogs (n=21) over repeated (n=53) washes with the allergen-reducing shampoo.



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1. Vreedegoor, D. W. Et al, 2012, J Allergy Clin Immunol



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