

Urticaria and rhinoconjunctivitis on a hunter

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Although scattered reports have been published on roe deer allergenicity, we present a case of rhinoconjunctivitis and contact allergy urticaria to roe deer dander on a hunter.

METHODS

A 38 years old man, with subclinical hypothyroidism and slight pollen rhinitis on January and May-June, refers sneezing, rhinoconjunctivitis and urticaria on contact with roe deer, for the last 2 years. He has contact with this animal 3 days a week from april to july and in September-october. We performed functional lung test, skin prick test (SPT) and immunological studies to disclose the relationship between exposure to this animal, sensitization and symptoms.



RESULTS

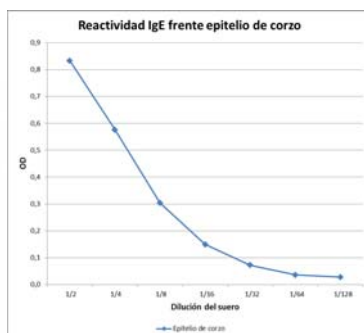
Baseline spirometry revealed a FEV1 of 4.870 mL (100% predicted), that was normal. We performed a bronchial challenge (BC) with methacholine, without any kind of bronchial response. FENO was of 33 ppb, and the nasal nitric oxide determination was of 3175 ppb. SPT to a standard panel of inhalants was positive to grass, olive and Cupressus but negative to other pollens, dust mites, fungus and dog-cat dander, confirming the cause of his pollen rhinitis. Also we did SPT to some epithelia allergens, that was positive to horse and goat, doubtful to cow and sheep, and negative to others (rabbit, mouse, cat, dog, hamster, goose, mixture of feather, ...).

We made an extract with the patient's roe deer hair and dander and when tested in prick test a weal of 15mm was obtained (positive control with histamine test a weal of 5 mm, and negative control with saline was negative).



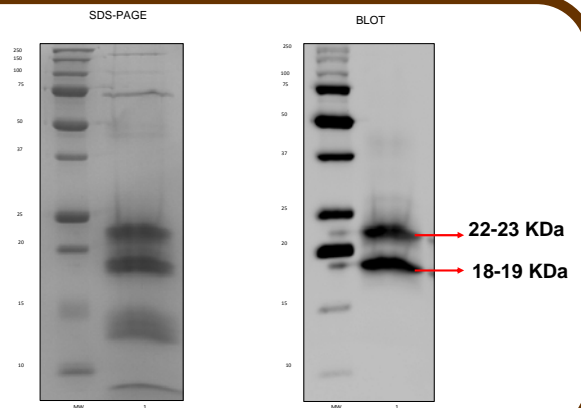
		Extract: roe deer						
		Basal	Salino	1,6 1:30 P/V	8 1:30 P/V	40 1:30 P/V	200 1:30 P/V	1000 1:30 P/V
PIFR _N	L/min	140	140	110				
	% resp. Saline		0	-21				
	Runny		0	2194				
	Sneezing		0	13				

We performed a nasal provocation test with this extract on different concentrations, and we obtain a positive result with the first one (less concentrated one): the patient began with runny, sneezing and falled of peak inspiratory flow rate nasal.



• IgE detected in ELISA showed a high optic density for the patient's sera.

• The immunoblot revealed IgE in the patient's serum that bound to a protein around 18-19 kDa and another around 22-23 kDa, that could be lipocalines.



CONCLUSION

This study confirms than roe deer can act as an allergen on hunters, with a demostrated IgE mediated reponse, responsible for rhinoconjunctival and skin clinic.