

Name: Niels Hjorth
Kaare Weismann

Address: Gentofte Hospital
Copenhagen/Hellerup

Subject: Occupational Dermatitis in Chefs and Sandwich Makers

In Newsletter, no. 1, p. 5, 1967, Malten reported the observation of "eczema hybrids", i.e. dermatitis caused by concurrent contact and atopic sensitivities. He suggested that atopic dermatitis might be aggravated by contact with proteins whose penetration through the epidermis was facilitated by a co-existent contact dermatitis.

Dermatitis from contact with animals' hair occurs in veterinary surgeons and milkers with atopic constitutions. Irritant dermatitis is common in both occupations and may be a prerequisite.

Similar combined atopic and contact sensitivities cause occupational dermatitis in chefs and sandwich makers (i.e. persons skilled in the trade of preparing Danish open sandwiches).

Materials and Methods

Between 1966 and 1971 three male chefs and six female sandwich makers were referred by insurance companies in connection with claims of compensation for occupational dermatitis of the hands.

Six out of the nine attributed their eczema to contact with fish and/or shellfish. All were examined by standard patch tests supplemented by a number of other materials as suggested by the history. All were also examined by a series of scratch tests with 36 protein allergens.

Table I: Causes of Dermatitis in Chefs and Sandwich Makers

<u>Age/Sex</u>	<u>Site of lesions</u>	<u>Clinical</u>	<u>Patch tests</u>	<u>Scratch tests</u>
68 m.	both hands	lobster	merthiolate (lobster, prawns)	-
26 f.	fingers & wrists	vanilla? herring?	vanilla allspice primula	-
22 f.	both hands	"work"	-	fish
33 f.	fingers & palm of both hands	meats fish	-	eel, duck herring
45 f.	all fingertips	onion	garlic primula	mackerel rapeseed
47 m.	all fingertips / right 2nd & 5th	"work" onion ?	(parsley) (dill)	fish pollen
44 f.	left 2nd & 3rd finger	herring prawns (nickel)	nickel rubber	lobster prawns
25 m.	fingers & palm of both hands	fish	garlic	cod, plaice herring
49 f.	left 1st, 3rd & 4th finger right index	herring salami	nickel garlic	herring, eel cod, plaice cheese

Results

As appears from the table, five patients had combined atopic and contact sensitivities. Two had positive patch tests and negative scratch tests. One of these, however, a chef aged 68 years, had in fact dermatitis from lobster as verified by repeated exposure tests. Two patients had positive scratch tests only to explain their dermatitis.

Comments

Lobsters and prawns cause irritant patch test reactions. Otherwise, patch tests with the foodstuffs incriminated were negative. Serological methods will be needed to determine whether the proteins cause a delayed type hypersensitivity in addition to the immediate type sensitivity revealed by scratch tests.

The very number of cases available for analysis suggests that sandwich makers have a high morbidity of occupational dermatitis. The findings support Malten's claim that intracutaneous tests or scratch tests should be revived in the examination of contact dermatitis.