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Patch testing in southern Greece: A retrospective study

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There are few studies looking at patch testing in Greece but there is a paucity of patch test data from Southern Greece, and especially Crete.¹⁻³ We report our clinical experience as the only patch testing reference center in southern Greece, over a 4-year-period.

METHODS

This study included 75 patients who were patch tested between December 2014 and December 2018 in the Department of Dermatology, University Hospital of Heraklion, Crete, Greece, which is the only patch test clinic in Crete and in Southern Greece. Patients were patch tested using Finn Chamber on Scanpor tape (Epitest, Hyrla, Finland). Readings were performed at day (D) 2 (D2) and again at day D4 by a dermatologist. Each of the 75 patients were tested with the modified baseline series of the ESCD. Reactions were scored according to criteria of the International Contact Dermatitis Research Group. Descriptive statistics were performed with R statistical software, version 3.6.2 (www.r-project.org).

RESULTS

The mean age of patients was 47.8, SD=16.681 and interquartile range was 26 with 44/75 (58.7%) females and 31/75 (41.3%) males. Positive reactions to nickel sulfate were seen in 13 (17.3%), to

fragrance mix and methylchloroisothiazolinone/methylisothiazolinone in 4 (5.3%) each. Further results can be seen in Table 1.

DISCUSSION

To the best of our knowledge, this is the first study to report patch testing results in the population of southern Greece (Crete). In our cohort, nickel was the most common allergen, in agreement with previous reports where prevalence ranged from 11.9% in Denmark to 26.4% in Spain.² Our results on nickel sensitization are in agreement with a recent study from Athens,¹ and also with other studies in southern Europe. More studies are needed to raise awareness to ensure timely diagnosis and evaluation of allergic contact dermatitis in this population of southern Greece.

CONFLICT OF INTEREST

The authors declare no conflicts of interest.

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REFERENCES

1. Tagka A, Stratigos A, Lambrou GI, Nicolaidou E, Katsarou A, Chatziioannou A. Prevalence of contact dermatitis in the Greek

TABLE 1 Frequency of positive reactions of the 28 allergens of the modified European baseline series in the population in Crete, southern Greece ($n = 75$)

Allergens	Concentration (% wt/wt) ^a	Total positive	Total positive %	95% confidence interval
Potassium dichromate	0.5	3	4	(0.8-11.2)
<i>p</i> -Phenylenediamine	1	3	4	(0.8-11.2)
Thiuram mix	1	3	4	(0.8-11.2)
Neomycin sulfate	20	3	4	(0.8-11.2)
Cobalt (II) chloride hexahydrate	1	3	4	(0.8-11.2)
Benzocaine	5	1	1.3	(0-7.2)
Nickel sulfate hexahydrate	5	13	17.3	(9.6-27.8)
Clioquinol	5	0	0	(0-3.9)
Colophonium	20	0	0	(0-3.9)
Paraben mix	16	2	2.7	(0.3-9.3)
N-isopropyl-N'-phenyl- <i>p</i> -phenylenediamine (IPPD)	0.1	3	4	(0.8-11.2)
Lanolin alcohol	30	3	4	(0.8-11.2)
Mercapto mix	2	0	0	(0-3.9)
Bisphenol A epoxy resin	1	1	1.3	(0-7.2)
Balsam of Peru (<i>Myroxylon pereirae</i> resin)	25	3	4	(0.8-11.2)
<i>p</i> -tert-Butylphenol formaldehyde resin	1	1	1.3	(0-7.2)
2-Mercaptobenzothiazole	2	0	0	(0-3.9)
Formaldehyde	2 ^a	0	0	(0-3.9)
Fragrance mix	8	4	5.3	(1.5-13.1)
Sesquiterpenelactone mix	0.1	0	0	(0-3.9)
Quaternium 15	1	2	2.7	(0.3-9.3)
Primin	0.01	0	0	(0-3.9)
Methylchloroisothiazolinone/ methylisothiazolinone	0.01 ^a	4	5.3	(1.5-13.1)
Carba mix ^b	3	1	1.3	(0-7.2)
Thiomersal ^b	0.1	1	1.3	(0-7.2)
Ethylenediamine dihydrochloride ^b	1	1	1.3	(0-7.2)
Textile dye mix	6.6	3	4	(0.8-11.2)
White petrolatum control ^b	100	0	0	(0-3.9)

Note: Vehicle is petrolatum, except where indicated otherwise.

^a(aq.), water.

^bNot part of the European baseline series.

population: a retrospective observational study. *Contact Dermatitis*. 2019;81(6):460-462.

- Uter W, Amario-Hita JC, Balato A, et al. European surveillance system on contact allergies (ESSCA): results with the European baseline series, 2013/14. *J Eur Acad Dermatol Venereol*. 2017;31(9):1516-1525.
- Bruze M, Goossens A, Isaksson M. Recommendation to increase the test concentration of methylchloroisothiazolinone/methylisothiazolinone in the European baseline patch test series - on behalf of the European Society of Contact Dermatitis and the European Environmental and Contact Dermatitis Research Group. *Contact Dermatitis*. 2014;71(1):35-40.

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