

concurrence of both diseases in terms of their common pathogenesis.³

Kim *et al.*⁴ classified segmental vitiligo on the face and demonstrated that lesions of segmental vitiligo on the face do not correspond to the dermatomal territories. According to that study, the shape and distribution of the vitiligo lesion of our patient are consistent with type I-b among six subtypes of segmental vitiligo on the face.⁴ However, the vitiligo lesion of our patient did not correspond exactly to type I-b segmental vitiligo. Thus, whether the vitiligo lesion of our patient is a focal or segmental vitiligo is still unclear.

Van Geel *et al.*⁵ also noticed that the majority of segmental vitiligo lesions did not fit exactly within the dermatomal distribution. They analysed the distribution pattern of segmental vitiligo to investigate additional factors beyond the neurogenic theory. They found that some segmental vitiligo lesions have a clear clinical overlap with mosaic dermatoses of melanocytic origin, especially segmental lentiginosis. Therefore, somatic mosaicism may also be a plausible explanation for developing segmental vitiligo in our case.

In the case of congenital melanocytic naevus (CMN), there have been several reports about regression of CMN with development of vitiligo, both with and without halo phenomenon.^{6,7} Furthermore, a recent study revealed that the prevalence of CMN was higher (although not significantly) in patients with vitiligo than in the control population.⁸ The development of vitiligo in CMN can be explained by an antimelanocytic immune reaction by CD8⁺ cytotoxic T cells against the highly expressed melanocytic antigens in CMN.⁶ Naevus of Ota, as in CMN, has higher expression of melanocytic antigens, thus it is tempting to speculate that immunological reaction by melanocyte-specific cytotoxic CD8⁺ T cells could be involved in the development of vitiligo within the naevus of Ota. Furthermore, segmental vitiligo has recently been reported to share an autoimmune mechanism with non-segmental vitiligo, and a CD8⁺ melanocyte-specific T-cell-mediated immune reaction is considered to play a role.^{9,10}

Our case is very interesting as it provides evidence for both somatic mosaicism and an autoimmune mechanism in the pathophysiology of segmental vitiligo. However, the question still remains why spontaneous regression and development of vitiligo are rarely seen in naevus of Ota compared with CMN. Thus, further studies and accumulation of case reports are needed to reveal the relationship between vitiligo and naevus of Ota, as well as the underlying mechanisms of segmental vitiligo.

Department of Dermatology, Severance
Hospital & Cutaneous Biology Research
Institute, Yonsei University College of
Medicine, 50 Yonsei-ro, Seodaemun-gu,
Seoul 120-752, Korea

Correspondence: Dae Suk Kim.

E-mail: dskin@yuhs.ac

S. SHIN

J.W. LEE

Y. LEE

D.S. KIM

References

- 1 Patzwahl R, Landau K, Kollias SS. Atypical midface tumor complicating nevus of Ota. *AJNR Am J Neuroradiol* 2005; **26**:2117–21.
- 2 Hidano A, Kajima H, Ikeda S *et al.* Natural history of nevus of Ota. *Arch Dermatol* 1967; **95**:187–95.
- 3 Luo XY, Xu AE, Li JC, Guan CP. Naevus of Ota associated with segmental vitiligo: a case report. *J Eur Acad Dermatol Venerol* 2010; **24**:611–12.
- 4 Kim DY, Oh SH, Hann SK. Classification of segmental vitiligo on the face: clues for prognosis. *Br J Dermatol* 2011; **164**:1004–9.
- 5 van Geel N, Speeckaert R, Melsens E *et al.* The distribution pattern of segmental vitiligo: clues for somatic mosaicism. *Br J Dermatol* 2013; **168**:56–64.
- 6 Hofmann UB, Bocker EB, Hamm H. Simultaneous onset of segmental vitiligo and a halo surrounding a congenital melanocytic naevus. *Acta Derm Venerol* 2009; **89**:402–6.
- 7 Sotiriou E, Apalla Z, Panagiotidou D, Ioannides D. Partial pigmentary regression of a congenital nevocytic naevus without halo phenomenon followed by generalized vitiligo. *J Eur Acad Dermatol Venerol* 2009; **23**:600–1.
- 8 van Geel N, Van Poucke L, Van de Maele B, Speeckaert R. Relevance of congenital melanocytic naevi in vitiligo. *Br J Dermatol* 2015; **172**:1052–7.
- 9 van Geel N, Mollet I, Brochez L *et al.* New insights in segmental vitiligo: case report and review of theories. *Br J Dermatol* 2012; **166**:240–6.
- 10 van Geel NA, Mollet IG, De Schepper S *et al.* First histopathological and immunophenotypic analysis of early dynamic events in a patient with segmental vitiligo associated with halo nevi. *Pigment Cell Melanoma Res* 2010; **23**:375–84.

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Colophony as a marker for fragrance allergy in the general European population

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DEAR EDITOR, We would like to make an addendum to our recent article in the *BJD* concerning the possible significance of colophony for fragrance allergy in the general European population.¹

Colophony is not used as a fragrance ingredient; however, it is a well-established marker of fragrance contact allergy.^{2–4} Colophony was therefore included as a fragrance allergy marker in our recent article in the *BJD* on contact allergy in the general population (prevalence 1.0%; 95% confidence interval 0.6–1.3%).⁵ When including colophony as a fragrance marker in the article on fragrance contact allergy,¹ together with Fragrance Mix (FM)I in the True Test containing *Evernia prunastri* (oak moss) with a high content of atranol and chloratranol, or FM II, or any of the individual materials in either FM I or FM II, or *Myroxylon pereirae* or sesquiterpene lactones, some

Table 1 Clinical relevance: avoidance of scented products due to skin complaints and itchy skin rash lasting > 3 days in the lifetime in subjects with contact allergy to different fragrance allergens

	Crude prevalence rate		+ avoidance of scented products due to skin problems in lifetime		+ itchy skin rash lasting > 3 days in lifetime	
	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)
'Conservative' approach ^a	129	4.7 (3.9–5.5)	82	3.0 (2.3–3.7)	60	2.2 (1.6–2.7)
'Clinical' approach ^b	78	2.8 (2.3–3.5)	56	2.0 (1.5–2.6)	42	1.5 (1.1–2.0)

^aFragrance Mix (FM)I True Test or FM II or hydroxyisohexyl 3-cyclohexene carboxaldehyde (HICC) or sesquiterpene lactone mix or Myroxylon pereirae or colophony. ^bFM I True Test or FM II and a single substance or HICC or sesquiterpene lactone mix or Myroxylon pereirae or colophony. The True Test was applied in only 2740 subjects, out of 3119 tested overall.

information in Table 5 of that article¹ changes slightly, according to the numbers given in Table 1.

¹Department of Social Medicine, Occupational and Environmental Dermatology, University Heidelberg, Thibautstraße 3, 69115 Heidelberg, Germany

²Department of Occupational and Environmental Dermatology and ⁷Department of Dermatology, Skåne University Hospital, Lund University, Malmö, Sweden

³Department of Dermatology, Azienda Ospedaliera Papa Giovanni XXIII, Bergamo, Centro Studi GISED – FROM Presidio Ospedaliero Matteo Rota, Via Garibaldi 13/15, 24122 Bergamo, Italy

⁴Department of Dermatology, University of Groningen, University Medical Center Groningen, Groningen, the Netherlands

⁵Department of Dermatology, University Hospital Jena, Jena, Germany

⁶Department of Dermatology, Coimbra University Hospital, Faculty of Medicine, University of Coimbra, Coimbra, Portugal

Correspondence: Thomas L. Diepgen.

E-mail: robert.ofenloch@med.uni-heidelberg.de

T.L. DIEPGEN¹
R. OFENLOCH¹
M. BRUZE²
S. CAZZANIGA³
P.-J. COENRAADS⁴
P. ELSNER⁵
M. GONCALO⁶
Å. SVENSSON⁷
L. NALDI³

5 Diepgen TL, Ofenloch RF, Bruze M et al. Prevalence of contact allergy in the general population in different European regions. *Br J Dermatol* 2015; DOI: 10.1111/bjd.14167.

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Reply to: Validation of database search strategies for the epidemiological study of pemphigus and pemphigoid

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DEAR EDITOR, We were interested to read the paper by Silverberg et al. published in the *BJD* in September 2015.¹ We note that the authors comment that previous studies of autoimmune bullous diseases have all been limited to single centres with cohorts that typically have at most a few hundred patients. It would appear that the authors have overlooked the papers that our group have published on this subject.^{2–4}

¹Faculty of Epidemiology and Population Health, London School of Hygiene and Tropical Medicine, London, U.K.

²Department of Epidemiology, University of Nottingham, Nottingham, U.K.E-mail: sinead.langan@lshtm.ac.uk

S.M. LANGAN¹
L. SMEETH¹
J. WEST²

References

- Diepgen TL, Ofenloch R, Bruze M et al. Prevalence of fragrance contact allergy in the general population of five European countries: a cross-sectional study. *Br J Dermatol* 2015; **173**:1411–19.
- Bråred Christensson J, Andersen KE, Bruze M et al. Air-oxidized linalool: a frequent cause of fragrance contact allergy. *Contact Dermatitis* 2012; **67**:247–59.
- Bråred Christensson J, Andersen KE, Bruze M et al. An international multicentre study on the allergenic activity of air-oxidized R-limonene. *Contact Dermatitis* 2013; **68**:214–23.
- Nardelli A, Carbonez A, Drieghe J, Goossens A. Results of patch testing with fragrance mix 1, fragrance mix 2, and their ingredients, and Myroxylon pereirae and colophonium, over a 21-year period. *Contact Dermatitis* 2013; **68**:307–13.

References

- Hsu D, Brieve J, Nardone B, Silverberg JI. Validation of database search strategies for the epidemiological study of pemphigus and pemphigoid. *Br J Dermatol* 2015. doi: 10.1111/bjd.14172.
- Langan S, Smeeth L, Hubbard R et al. Bullous pemphigoid and pemphigus vulgaris – incidence and mortality in the U.K.: population based cohort study. *BMJ* 2008; **337**:a180.
- Langan S, Hubbard R, Fleming K, West J. A population-based study of acute medical conditions associated with bullous pemphigoid. *Br J Dermatol* 2009; **161**:1149–52.