Comment on: Risk factors for frontal fibrosing alopecia: A case-control study in a multiracial population

To the Editor: We read the article of Müller Ramos et al[1] on risk factors for frontal fibrosing alopecia (FFA): A case-control study in a multiracial population, with special interest. Initially considered uncommon, the frequency of FFA has increased exponentially worldwide since the original report of Kossard in 1994.[2] As yet, its etiology has remained obscure while attracting the attention of the medical community and giving rise to speculations, particularly on the pathogenic role of environmental factors. The original questionnaire-based study on patients with FFA has suggested an association between FFA and the use of sunscreens and sunscreen-containing facial moisturizers.[3] Further studies investigating the link between sunscreens and FFA have produced conflicting results. Ultimately, Müller Ramos et al found in a Brazilian population an association with formalin-based hair straightening, use of nondermatologic soap, and facial moisturizers, whereas FFA was not associated with sunscreens.

Evidently, studies investigating the link between hair and facial skin care products and FFA have been undertaken in patients from different countries and interpreted irrespective of the regional peculiarities in hair and facial skin care. Examination of the literature suggests that there is a strong geographical relation between FFA and the particular hair and facial skin care habits, with the use of sunscreens prevailing in the fair-skinned British population and of hair straightening with formalin in the hair conscious Brazilians. In our opinion, it is unsatisfactory to perform regionally biased questionnaire-based studies.

Finally, in a case-control study, the proper choice of the control group is determinant. Because androgenetic alopecia is only a facultative comorbidity in a small number of patients with FFA, the question arises whether androgenetic alopecia with its decrease of hair length and quality and consequently different hair grooming practices is appropriate. Moreover, FFA may represent a new clinical presentation form that is common to varied underlying conditions rather than a new nosologic entity, because, in addition to lichen planopilaris, cutaneous lupus erythematosus has also been observed with an FFA-like clinical presentation.[4] In this case, choosing lichen planopilaris without evidence of FFA as a control group to identify the causal factor for the specific clinical presentation pattern of FFA in underlying lichen planopilaris may be more relevant.

Alternative leads for future investigations into the etiopathogenesis of FFA are needed, away from simplistic or unreflected questionnaire-based case-control studies on cosmetics, or this practice may end up in a dead end far from relevance or adequate etiopathologic reasoning. Eventually, there is a need to venture beyond statistics to include evidence of causality, such as timing of events, patient reaction to removal of the suspected agent and rechallenge. Also needed is a rational hypothesis with regard to putative causal relationships, as exemplified by the studies into the role of estrogen-like endocrine disrupting chemicals, such as benzophenones in chemical sunscreens, or the detection of titanium, a mineral filter used in mineral-based sunscreens, in the hair shaft of patients with FFA.[5]

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Conflicts of interest

None disclosed.

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