Letter

Periorbital hyperchromia

Hipercromia periorbital

Authors:

Paula Yoshiko Masuda' Ana Luiza Grizzo Peres Martins' Patrick Alexander Wachholz²

- ¹ Volunteer Preceptor at Instituto Lauro de Souza Lima (ILSL) - Bauru (SP), Brazil
- ² Physician; MSc in Public Health Candidate from the Faculdade de Medicina de Botucatu – Botucatu (SP), Brazil

Correspondence:

Instituto Lauro de Souza Lima Rodovia Comandante João Ribeiro de Barros, Km 225/226 17034-971 – Bauru – SP - Brazil E-mail: sandmanb@terra.com.br

Received on: 9 March 2014 Approved on: 13 June 2014

The present study was carried out at Instituto Lauro de Souza Lima (ILSL) - Bauru (SP), Brazil.

ABSTRACT

With the intention of contributing to the manuscript sent by Lüdtke et al. (2013) to this journal, the authors send this letter to the editors with comments relevant to the article, which examines the profile of the sample of patients with periorbital hyperpigmentation assisted at an ambulatory unit in southern Brazil. The authors of this letter present their considerations and suggestions to the authors of the referred article, and add relevant comments to the published study. **Keywords:** hyperpigmentation; eye; dermatology.

RESUMO

Com a intenção de contribuir com o artigo de Lüdtke et al. (2013) publicado neste periódico, enviamos esta carta aos editores com considerações e comentários ao texto, que versa sobre o perfil de amostra de pacientes com hipercromia periorbital assistidos em unidade ambulatorial no Sul do país. Apresentamos nossas considerações e sugestões aos autores, bem como adicionamos comentários pertinentes ao trabalho publicado.

Palavras-chave: hiperpigmentação; olho; dermatologia.

Dear Editor,

It was with great interest that we have analyzed the article written by Lüdtke *et al.*,¹ which describes the profile of a sample of patients with periorbital hyperpigmentation (POH) who were treated at an outpatient unit in southern Brazil. The authors of the paper introduced the subject elegantly, presenting a didactic classification for the condition besides supplementing it with appropriate diagnosis and preventive management information. Contributing to the introductory section, we highlight the interesting classification of POH proposed by Ranu *et al*,² who consider other possible etiologic factors in the condition's description, namely: vascular; due to post-inflammatory hyperpigmentation; due to shadow effect; constitutional (secondary to excessive constitutional presence of pigmentation); among others.

Despite the originality and relevant contribution offered by the results presented by Lüdtke *et al.*¹, it is worth highlighting some considerations.

Firstly, when stating their goals the authors proposed to evaluate the prevalence of POH in the studied sample. In fact population studies with cross-sectional design can be used to calculate measurements of the frequency of occurrences, such as the prevalence of a condition. Nevertheless, the lack of data on the total number of patients – the population – treated in the relevant dermatology service during the study period, combined with the sampling method employed, does not allow for the calculation of frequency measurements. Therefore, the authors' assertion (in the article's *Abstract* and *Objectives* sections) that one of the goals of the study was to assess this prevalence, but then not presenting this data in the *Results* or *Conclusions* sections, has caused confusion.

Furthermore, in the *Methods* section, the exclusion criteria presented by the authors are contradictory. In theory, these criteria should not adhere to the opposite of the inclusion criteria. Much to the contrary, it is recommended that the exclusion criteria be used to exclude patients who, after having been included, voluntarily express a desire to withdraw from the research, or to eliminate patients who must be excluded because their permanence would cause some sort of bias to the analysis of data or risk to the patient (for instance, the use of potentially teratogenic drugs in pregnant women).

Also, when employing the Kolmogorov-Smirnov test to assess the symmetry of the continuous variables, the authors should have described which variables showed normal distribution according to the test, using in the tables only measures of central tendency compatible with the result of that test (parametric or non-parametric), rather than presenting means and medians for all variables. Likewise, due to the fact that it was a descriptive study, we felt there was a lack of references to studies that would enable the authors to compare their findings with those of similar investigations. In a quick literature search, we were able to find at least two studies, ^{2,3} published in the last three years that would greatly enrich the discussion of the article, especially those elements which pertain to the evaluation of the sociodemographic and clinical profile of the sample.

Moreover, when Lüdtke *et al.*¹ claim that the preponderance of women that they have found in their sample is consistent with the literature, no information on such literature is offered. Ranu *et al.*², for example, found a predominance of men (62.5%) in a cross-sectional study with the prevalence of 20% of POH (N = 1,000). Regarding the description of POH family history, the researched literature was also quite contradictory: Verschoore *et al.*³ described a frequency of 21.2%, while Ranu *et al.*² found 42.2% and Lüdtke *et al.*¹ 63.7% of affirmative answers to that question.

An interesting analysis performed by Ranu *et al.*² with the application of the Tukey's multiple comparison test between the proportions of different types of POH, has not evidenced any statistically significant correlation with sleep deprivation, nonetheless the presence of a positive family history evidenced association with POH due to post-inflammatory hyperpigmentation.

In summation, we would like to congratulate the authors for the originality of the research, hoping that our contributions may enhance future examinations of their study.

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