sitates evaluation to rule out malignant melanoma.

Overall, this case adds clinical evidence that TNF- α plays a critical role in the differentiation and proliferation of melanocytes, inducing the development of melanocytic nevi.

REFERENCES

- 1. de Boer NK, Kuyvenhoven JP. Eruptive benign melanocytic naevi during immunosuppressive therapy in a Crohn's disease patient. Inflamm Bowel Dis 2011;17:E26.
- 2. Kouklakis G, Efremidou EI, Pitiakoudis M, Liratzopoulos N, Polychronidis ACh. Development of primary malignant melanoma during treatment with a TNF- α antagonist for severe Crohn's disease: a case report and review of the hypothetical association between TNF- α blockers and

- cancer. Drug Des Devel Ther 2013;7:195-199.
- Burmester GR, Panaccione R, Gordon KB, McIlraith MJ, Lacerda AP. Adalimumab: long-term safety in 23 458 patients from global clinical trials in rheumatoid arthritis, juvenile idiopathic arthritis, ankylosing spondylitis, psoriatic arthritis, psoriasis and Crohn's disease. Ann Rheum Dis 2013;72:517-524.
- Park JJ, Lee SC. A case of tumor necrosis factor-alpha inhibitors-induced pustular psoriasis. Ann Dermatol 2010; 22:212-215.
- Katoulis AC, Kanelleas A, Zambacos G, Panayiotides I, Stavrianeas NG. Development of two primary malignant melanomas after treatment with adalimumab: a case report and review of the possible link between biological therapy with TNF-alpha antagonists and melanocytic proliferation. Dermatology 2010;221:9-12.

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Benefits of Screening for Oral Lichen Planus

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Dear Editor

Kim et al.¹ in their interesting study compared the allergological data on the oral lichen planus (OLP) with those of other published articles regarding the oral lichenoid reactions (OLRs). We would underscore that the prognostic value of the screening patch test on the clinical behaviour of these diseases is significantly different. Regarding to the OLRs induced by dental alloy restorations, both the metals and particles/ions of the corrosive process are believed that could perturb the surface antigens of the basal layer

keratinocytes in neighboring mucous membranes, resulting an autoimmune activation and T-cell-mediated reaction². Clinical evidence is supported by fact that ORLs can disappear as consequence of replacing of the metal alloy—mostly the amalgam fillings—with non-metal materials². Conversely, in OLP the triggering for the immune-activation of the basal layer keratinocytes remains unrecognized and the lesions can rarely achieve a complete healing². Medical history and oral examination of a subject with OLRs may provide suggestions for the potential sensi-

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tizers, leading to selection of the patch testing allergens. Regrettably, a baseline patch testing series it is not sufficiently adequate on the basis of just suspicious allergens because, often, unsuspected ones can be useful to determine the allergic sensibilization³. In addition, supplementary patch testing materials that take into account of the anamnesis and period of exposure of the subject at potential antigens should be considered. For this reason, each patient should get a custom setting of antigenic substances, in keeping with his history of allergy³.

Where not provided, the cross-reactivity between metals and other substances, can lead to scarce outcomes for management of OLRs, giving rise to doubt about the predictability of patch testing. This investigation remains anyway useful to identify the type of dental material that can be used to substitute the suspect substance(s) that causes OLRs. Nevertheless, it seems that the substitution of the amalgam fillings can produce meaningful improvements in a large part of subjects with OLRs, regardless of patch testing results⁴.

Kim et al.¹, have reported clinical relevance in 50% of the OLP patients, and improvement in symptoms after removal of the allergen in one case. These findings make the screening patch testing advisable also in the OLP patients, although its prognostic value in the OLP and OLRs diseases should be clarified in further study.

Hopefully, the screening patch testing on a wide amount of allergens, in accordance to the history of exposure of the patient, should be performed before positioning of exogenous biomaterials in oral cavity, in particular in ORLs and OLP patients. Accordingly, a positive patch testing outcome (expression of immune activation) is not enough reliable to justify the signs and symptoms of clinical illness in the allergic contact dermatitis. Therefore, it should not take definitive measures of treatment (replacement of dental materials) on the basis of an only positive patch testing outcome.

These aspects can be considered of prominence, especially in relation to OLRs and OLP which have shown a potential tendency to develop a malignant change.

REFERENCES

- Kim TW, Kim WI, Mun JH, Song M, Kim HS, Kim BS, et al. Patch testing with dental screening series in oral disease. Ann Dermatol 2015;27:389-393.
- Mårell L, Tillberg A, Widman L, Bergdahl J, Berglund A. Regression of oral lichenoid lesions after replacement of dental restorations. J Oral Rehabil 2014;41:381-391.
- 3. Johansen JD, Aalto-Korte K, Agner T, Andersen KE, Bircher A, Bruze M, et al. European Society of Contact Dermatitis guideline for diagnostic patch testing-recommendations on best practice. Contact Dermatitis 2015;73:195-221.
- Lartitegui-Sebastián MJ, Martínez-Revilla B, Saiz-Garcia C, Eguizabal-Saracho S, Aguirre-Urizar JM. Oral lichenoid lesions associated with amalgam restorations: a prospective pilot study addressing the adult population of the Basque Country. Med Oral Patol Oral Cir Bucal 2012;17:e545-e549.