

Psoriasis and vitiligo – one therapy for two diseases

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Sir,

Vitiligo is the most common depigmenting disorder, with a world prevalence of approx. 0.5–2% [1]. Its exact pathogenesis is not clear but an autoimmune hypothesis has been supported by both experimental data and clinical association with autoimmune diseases [2]. Psoriasis is, likewise, a dermatotic condition relatively common in the general population, and the literature provides several reports of its coexistence with vitiligo. Some authors consider this simply to be a matter of coincidence, as both are relatively common dermatological diseases. Others have suggested a common pathogenic relationship between the two diseases, although the mechanism has not yet been fully elucidated [3].

We report the case of a 43-year-old female with plaque psoriasis present since the age of 6. At 36, she was diagnosed with vitiligo, and the locations of the individual lesions of both diseases were not coincident. Presenting at our department, the patient had already been on topical therapies and UVB phototherapy. Psoriatic plaques showed a good response to phototherapy and the hypopigmented patches of vitiligo exhibited some repigmentation initially, although only temporarily. A recrudescence of psoriatic lesions during these therapies motivated the institution of methotrexate, to which psoriasis showed some response, but vitiligo patches remained unaltered. However, 17 months later, the patient noticed a worsening of the psoriatic lesions, and methotrexate was discontinued (Figs. 1a–1c). At this point, laboratory tests, including complete blood count, routine blood chemistry, and tests for thyroid function and autoimmunity, fell within normal ranges, and the patient was started on etanercept 50 mg weekly. Over the subsequent weeks, the hypopigmented patches

had started to undergo repigmentation and, 4 months later, the vitiligo lesions in the upper and lower limbs displayed a very favorable evolution, with evident repigmentation, which the patient noticed even earlier than the response of the psoriatic plaques, which, this time, were less scaly and infiltrative (Figs. 2a–2c). No adverse side effects related to the administration of etanercept were noted. The patient was kept on the biological agent, with good control of the psoriatic plaques and a steady repigmentation of the vitiligo patches.

The hypothesis of a common pathogenesis of psoriasis and vitiligo has been studied, and tumor necrosis factor alpha (TNF- α) has been considered a plausible intervener in this setting [3]. It has been shown that vitiligo patients have increased tissue and serum levels of proinflammatory soluble mediators. In particular, TNF- α has been shown to inhibit melanogenesis and promote melanocyte apoptosis, at least in vitro: the levels of TNF- α in vitiligo lesions not only become higher than in nonlesional skin, but are also closely related to disease activity [4]. According to some authors, higher tissue levels of TNF are, apparently, correlated with a higher vitiligo activity score, which leads them to consider the intensity of TNF staining in vitiligo lesions as a biomarker for potentially successful anti-TNF treatment in cases refractory to conventional treatment [4]. There have been reports of vitiligo patients receiving TNF inhibitors—including initially for other comorbidities, such as psoriasis, as in our case—and showing repigmentation or at least improvement in vitiligo lesions. However, other reports of TNF inhibitors used in treatment of vitiligo have shown conflicting results [5,6], and some studies have suggested that anti-TNF therapy may induce de novo vitiligo in patients with other autoimmune diseases [1].

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Figure 1: (a-c) Relatively diffuse psoriasis plaques and vitiligo patches in noncoincident locations.



Figure 2: (a-c) Extensive repigmentation of the vitiligo patches at a 4-month follow-up.

Our case corroborates the literature about the likely role of TNF- α in the pathogenesis of vitiligo and emphasizes anti-TNF therapy as a potential therapeutic tool in selected vitiligo patients. The full applicability of TNF inhibitors in vitiligo is far from established and, despite its potential as a viable therapeutic option, further long-term studies investigating its efficacy in vitiligo and/or in combination with other therapeutic agents are necessary.

Consent

The examination of the patient was conducted according to the principles of the Declaration of Helsinki.

The authors certify that they have obtained all appropriate patient consent forms, in which the patients have given consent for images and other clinical information to be included in the journal. The patients understand that their names and initials will not be published and due effort will be made to conceal their identity, but that anonymity cannot be guaranteed.

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