CASE REPORT

Poikilodermatous changes on the forearms of a woman practicing aroma-therapy: extracervical poikiloderma of Civatte?*

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DOI: http://dx.doi.org/10.1590/abd1806-4841.20142925

Abstract: We report the case of a 48-year-old, Caucasian female who presented with slowly progressing asymptomatic poikilodermatous changes of the extensor aspects of the forearms. She also had typical Poikiloderma of Civatte on the V of the neck and erythemato-telangiectatic rosacea of the central face. The patient had been practicing aroma-therapy for many years. Histologic examination revealed findings consistent with PC. Patch-testing revealed positive reactions to Fragrance mix and Nickel sulphate. Based on clinical and histological findings, a diagnosis of extracervical PC was suggested. PC with extra-cervical or extra-facial involvement is rare. In addition, this case supports the theory that contact sensitization to fragrances may contribute to the development of PC.
Keywords: Dermatitis, contact; Hyperpigmentation; Hypopigmentation; Telangiectasia, hereditary hemorrhagic

INTRODUCTION

Acquired poikiloderma of the face and neck (Civatte, 1923) is a rather common, chronic, disfiguring skin condition.[1] It has been diagnosed in 1.4% of dermatologic consultations in Greece, but the true prevalence is likely higher, especially among fair-skinned populations living in sunny climates.[2] Poikiloderma of Civatte (PC) most often affects individuals in the 4th to 7th decade. It is more common in menopausal females, including iatrogenic menopause.[3]

The aetiology of PC appears to be multifactorial. The predilection for sun-exposed areas indicates that cumulative sun exposure plays a central role.[4,5] The age and sex distribution of the patients, in addition to the well-known association with the menopause, suggest that hormonal factors, combined with the normal ageing process, may be involved. Familial cases and the occurrence of PC in the absence of all suspected causal factors, can lead to speculation that a genetic predisposition may exist.[6] A statistically significant difference of positive patch test reactions, especially to fragrances, was documented in PC patients, compared with age and sex-matched controls, suggesting that a contact delayed hypersensitivity reaction may underlie PC.[4,7]

CASE REPORT

A 48-year-old, skin photo-type II Caucasian female presented with asymptomatic poikilodermatous changes of the forearms that progressed slowly during the past two years. Her medical history was unremarkable. She was pre-menopausal and reported minimal sun exposure, both intentional and unintentional. The patient was an aroma-therapist for many years, and her arms were exposed to aromatic essential oils on a daily basis. Upon clinical examination, erythemato-telangiectatic reticular patches with indistinct borders, symmetrically distributed over the extensor aspects of the forearms, were observed (Figure 1). She had also typical PC on the V of the neck and rosacea of the central face, both of the erythemato-telangiectatic type (Figure 2).

Histologic examination of the affected forearm's skin revealed a moderately thin and flattened epidermis. Dilated blood vessels were noted in the elastotic upper dermis, with mild perivascular lymphohistiocytic infiltrate, as well as few melanophages in the dermis. Moreover, the patient was patch-tested with the European Standard Series and positive reactions were found to Fragrance mix and Nickel sulphate. Laboratory investigation for other causes of acquired poikiloderma proved negative. Based on

Received on 03.07.2013.
Approved by the Advisory Board and accepted for publication on 11.09.2013.
* Work performed at the 2nd Department of Dermatology and Venereology, National and Kapodistrian University of Athens Medical School, "Attikon" General University Hospital – Athens, Greece.
Conflict of interest: None
Financial funding: None

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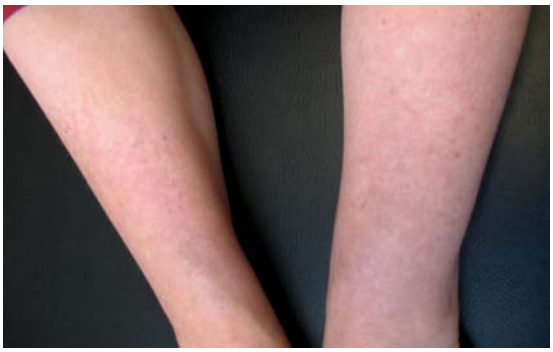

Figure 1: Erythemato-telangiectatic poikilodermatous changes of the forearms

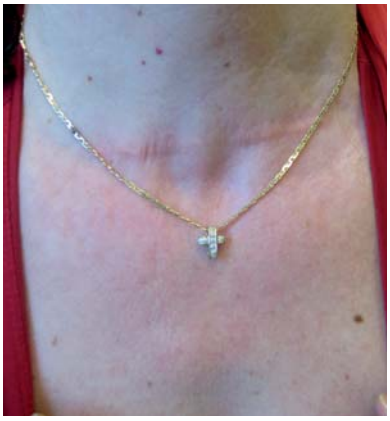

Figure 2: Erythemato-telangiectatic poikiloderma of Civatte on the V of the neck

clinical and histological findings, a diagnosis of extracervical PC was suggested.

DISCUSSION

PC manifests clinically via a combination of linear telangiectasia, mottled hyperpigmentation and superficial atrophy in a reticular pattern, symmetrically affecting the sun exposed areas of the neck, upper chest and peripheral face, invariably sparing the anatomically shaded areas.[2] To the best of our knowledge, this is the first reported case of PC affecting areas other than the face and neck. Interestingly, in our patient, the dorsa of her hands remained unaffected, as occurs with the central face in typical PC. It appears that PC may develop in areas intermittently exposed to ultraviolet radiation where the skin is thinner, such as the neck, or, as in our case, the forearms.

Differential diagnosis includes extra-facial rosacea and acquired brachial cutaneous dyschromatosis (ABCD). ABCD manifests by asymptomatic, gray-brown reticular patches on the dorsal aspect of the forearms.[8] It is most commonly observed in perimenopausal women, especially those under antihypertensive drug therapy with angiotensin-converting enzyme inhibitors. PC was associated with ABCD in 9 out of 20 patients (45%). Moreover, clinical and histological findings may link this entity more closely to a dermatosis of sun damage, such as PC.[9] In our opinion, rosacea, PC and ABCD may represent variants in the same nosological spectrum.[10]

Our patient may be the first reported case of PC with extra-cervical or extra-facial involvement. In addition, this case provides further support to the theory that contact sensitization to fragrances may contribute to the development of PC. In this context, evaluation of PC patients with patch-testing and avoidance of documented allergens, may be beneficial. ❑

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How to cite this article: Katoulis A, Makris M, Gregoriou S, Rallis E, Kanelleas A, Stavrianeas N, Rigopoulos D. Poikilodermatous changes on the forearms of a woman practicing aroma-therapy. Is it extracervical poikiloderma of Civatte? An Bras Dermatol. 2014;89(4):655-6.