MULTIPLE ERUPTIVE DERMATOFIBROMAS ON A PATIENT WITH RHEUMATOID ARTHRITIS TREATED WITH ETANERCEPT

A. OANȚĂ*, SMARANDA ȚĂREAN**, V. ILIESCU*, MARIA MAGDALENA CONSTANTIN***, FLORICA ȘANDRU****

Summary

Dermatofibromas (DF) are benign skin tumors usually single or in small number, frequently encountered. Multiple eruptive dermatofibromas (MEDF) are rare and often associated with neoplastic or immune diseases.
57 years old patient is consulted for multiple papular and nodular lesions located on the upper and lower limbs, occurred six months ago. The patient's history highlights rheumatoid arthritis diagnosed in 1996 and treated with Etanercept 50mg subcutaneous since 2007. Histological examination reveals a fibrohisticocytic dermal proliferation surrounded by thick collagen fibers. The skin surface presents moderate acanthosis with basal layer hyperpigmentation. The diagnosis of MEDF was established.

Multiple eruptive dermatofibromas (MEDF) are defined by the presence of at least 15 dermatofibromas in the same patient. MEDF are rare, usually occurring sporadically, being also described very rare cases of familial MEDF. In 2/3 of cases, MEDF are associated with other pathologies such as autoimmune diseases, immuno-suppressants, malignancies, infections, metabolic disorders.

MEDF is a rare condition that usually occurs in immunocompromised patients.

Key words: *dermatofibroma, etanercept, multiple eruptive dermatofibromas, rheumatoid arthritis.*

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Introduction

Dermatofibromas (DF) are benign skin tumors usually single or in small number, frequently encountered. Multiple eruptive dermatofibromas (MEDF) are rare and often associated with neoplastic or immune diseases.

Clinical case

57 years old patient is consulted for multiple papular and nodular lesions located on the upper and lower limbs, occurred six months ago. The patient's history highlights rheumatoid arthritis diagnosed in 1996 and treated with Etanercept 50 mg subcutaneous since 2007. Dermatologic examination reveales multiple papular and nodular lesions, approximately 50, asymptomatic, of firm consistency, brown, 0.5-1 cm in diameter, located on both upper and lower limbs. Histological examination reveals a fibrohisticocytic dermal proliferation surrounded by thick collagen fibers. The skin surface presents minimal hyperkeratosis and moderate acanthosis with basal layer hyperpigmentation. The biological examinations were normal and antinuclear antibodies, anti-native DNA antibodies, antiphospholipid antibodies, ANCA and rheumatoid factor were negative. Clinical and histologic, the diagnosis of MEDF was established.

Discussions

Dermatofibromas (DF) are benign skin lesions frequently encountered, solitary or not exceeding 5 lesions, presenting as nodules or

* Dermamed, Dermatology Department, Brașov, Romania
** TopMed, Dermatology Department, 1, Târgu-Mureș, Romania
*** Colentina Clinical Hospital, Dermatology 2, Bucharest, Romania
**** Department of Dermatology, "Elias" University Emergency Hospital, Bucharest, Romania

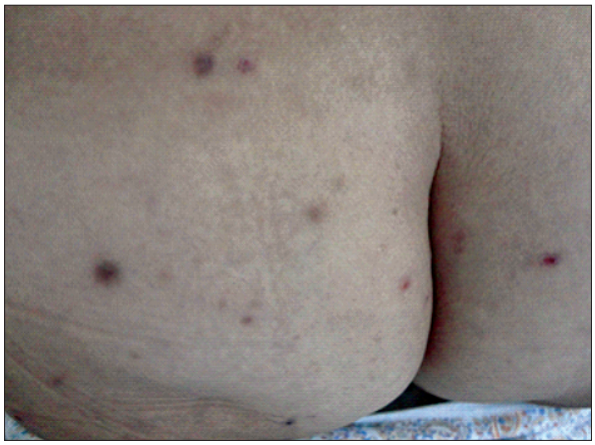

Figura 1. Aspecte clinice ale DFME
Figure 1. Clinical aspects of DFME

asymptomatic papules, with dimensions from a few millimeters to a few centimeters, red brown or dark brown. They appear especially in young and middle-aged women and are more

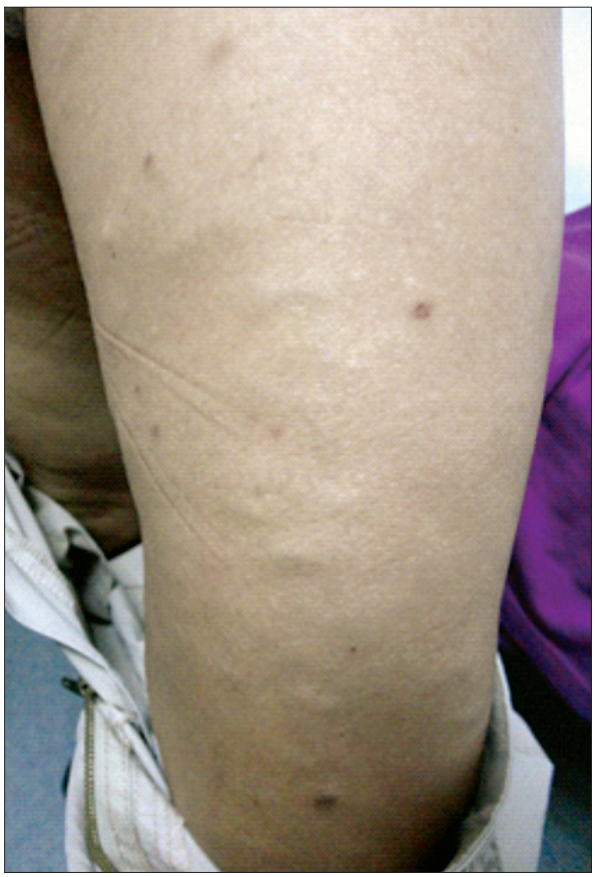

Figura 2. Aspecte clinice ale DFME
Figure 2. Clinical aspects of DFME

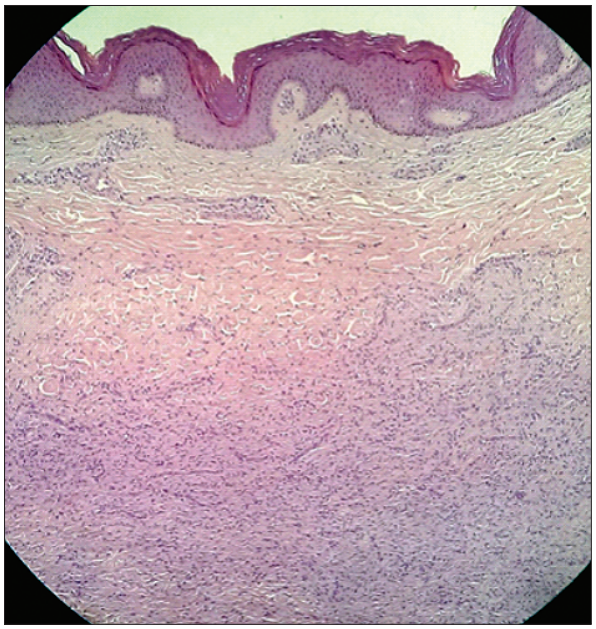

Figura 3. Aspect histopatologic al DFME
Figure 3. Histopathological appearance of DFME

frequently located on lower limbs and less on trunk and upper limbs. Although a number of authors consider insect stings and traumas as a cause of local tissue proliferation, the etiology of these fibrohistocytic lesions remains unknown.

Multiple eruptive dermatofibromas (MEDF) are however rare, occurring usually sporadically (1), and very rare cases of familial MEDF (2,3) are described. MEDF were individualized by Baraf and Shapiro in 1970, defined by the presence of at least 15 dermatofibromas in the same patient (4). Amirrati et al., taking into consideration the eruptive nature of the eruption, extended this definition to the occurrence of 5 to 8 lesions over a period of 4 months (5). MEDF can affect unusual areas like face, palms, plants (6) and eyelids (7). MEDF does not differ clinically and histologically from solitary forms.

MEDF have been rarely described in healthy individuals, 2/3 of cases are patients with autoimmune diseases and neoplasias treated with immunosuppressive medication or cases of organ transplantation suggesting the role of impaired immunity in the pathogenesis of MEDF (1,7,8,9,10,11,12). Thus, MEDF is associated with autoimmune diseases (lupus erythematosus, dermatomyositis, Gougerot-Sjogren's syndrome,

pemphigus vulgaris, myasthenia gravis, ulcerative colitis), malignancies (solid tumors, malignant hemopathies such as mycosis fungoides, acute and chronic myeloid leukemia, myelodysplastic syndrome), sarcoidosis, HIV infection, kidney transplantation, immunosuppressive medications (cyclophosphamide, azathioprine, methotrexate, corticosteroids, interferon alpha). Other conditions associated with the occurrence of MEDF are metabolic diseases (diabetes mellitus, hypertriglyceridemia, hypercholesterolemia), atopic eczema, hydronephrosis, pregnancy, pulmonary hypertension and obesity.

The occurrence of eruptive dermatofibromas during treatment with etanercept is poorly understood and its frequency has not been established. In conclusion, DMFE is a rare condition that usually occurs in immunosuppressed patients.

Bibliography

1. Niiyama S, Katsuoka K, Happle R, Hoffmann R. Multiple eruptive dermatofibromas: a review of the literature. *Acta Derm Venereol.* 2002;82:241-4.
2. Marque m, Pallure V, Huet P, Bessis D, Guillot B. Multiple familial "eruptive" dermatofibromas. *Ann Dermatol Venereol* 2013; 140:452-454.
3. Yazici AC, Baz K, Ikizoglu G, Koca A, Kokturk A, Apa DD. Familial eruptive dermatofibromas in atopic dermatitis. *J Eur Acad Dermatol Venereol* 2006; 20:90-2.
4. Baraf CS, Shapiro L. Multiple histiocytomas. Report of a case. *Arch Dermatol* 1970;101:588-90.
5. Ammirati CT, Mann C, Hornstra IK. Multiple eruptive dermatofibromas in a patient with dermatomyositis taking prednisolone and methotrexate. *J Am Acad Dermatol* 2007;57:S81-4.
6. Salamska C, Bennion S. Eruptive dermatofibromas in a kindred. *Cutis* 2002; 69: 187-8.
7. Roberts JT, Byrne EH, Rosenthal D. Familial variant of dermatofibroma with malignancy in the proband. *Arch Dermatol* 1981 117: 12-5.
8. Massone C, Parodi A, Virno G, Rebora A. Multiple eruptive dermatofibromas in patients with systemic lupus erythematosus treated with prednisone. *Int J Dermatol.* 2002; 41: 279-81.
9. Huang PY, Chu CY, Hsiao CH. Multiple eruptive dermatofibromas in a patient with dermatomyositis taking prednisolone and methotrexate. *J Am Acad Dermatol.* 2007; 57: S81-4
10. Alexandrescu DT, Wiernik PH. Multiple eruptive dermatofibromas occurring in a patient with chronic myelogenous leukemia. *Arch Dermatol.* 2005; 141: 397-8.
11. Kovach BT, Sams HH, Stasko T. Multiple atypical fibroxanthomas in a cardiac transplant recipient. *Dermatol Surg.* 2005; 31 :467-70.
12. Kanitakis J, Carbonnel E, Delmonte S, Livrozet JM, Faure M, Claudy A. Multiple eruptive dermatofibromas in a patient with HIV infection: case report and literature review. *J Cutan Pathol.* 2000; 27: 54-6.

Conflict of interest
NONE DECLARED

Correspondance address: Smaranda Ţărean
TopMed, Dermatology Department, 1,
Dorobanţilor Street, Târgu-Mureş, Romania
e-mail: vera_veregut@yahoo.com