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Coexistence of vulgar psoriasis and systemic lupus erythematosus - case report

Coexistência de psoríase vulgar e lúpus eritematoso sistêmico: relato de caso

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ABSTRACT: Psoriasis and Systemic lupus erythematosus (SLE) are autoimmune diseases caused by multifactorial etiology, with involvement of genetic and non-genetic factors. The purpose of this case report is to clearly and succinctly present a rare association of autoimmune pathologies, which, according to some similar clinical features (arthralgia and cutaneous lesions), may interfere or delay the diagnosis of its coexistence. In addition, it is of paramount importance to the medical community to know about the treatment of this condition, since there is a possibility of exacerbation or worsening of one or both diseases. The combination of these diseases is very rare, so, the diagnosis is difficult and the treatment even more delicate, due to the possibility of exacerbation of one of them. We report the case of a middle-aged woman, carrier of Psoriasis who developed, subsequently, SLE. Treatment of acute SLE was performed with low dose Prednisone associated with Ciclosporin. The maintenance treatment is being performed with Adalimumab, with substantial improvement of arthralgia and psoriatic lesions. It was concluded then, that due to the limited number of psoriatic patients complicated with SLE, diagnosis and treatment of this condition can be challenging for the physician.

Keywords: Psoriasis; Systemic lupus erythematosus; Autoimmune diseases.

RESUMO: Psoríase e Lúpus eritematoso sistêmico (LES) são doenças autoimunes de etiologia multifatorial, com envolvimento de fatores genéticos e não genéticos. O objetivo deste relato de caso é expor de maneira clara e sucinta uma associação rara de patologias autoimunes, que, de acordo com algumas características clínicas semelhantes (artralgia e lesões cutâneas), podem dificultar ou postergar o diagnóstico de sua coexistência. Além disso, é de suma importância à comunidade médica o conhecimento a respeito do tratamento desta condição, já que existe a possibilidade de exacerbação ou piora de uma, ou de ambas as doenças. Relata-se o caso de uma mulher de meia idade, portadora de psoríase e que desenvolveu, posteriormente, LES. O tratamento do LES agudo foi feito com Prednisona em baixas doses associado à Ciclosporina. Já a terapia de manutenção está sendo feita com Adalimumab, resultando em melhor controle da artralgia e das lesões psoriásicas. Conclui-se que devido ao limitado número de pacientes psoriásicos complicados com LES, o diagnóstico e também o tratamento desta condição podem ser um desafio para o médico.

Descritores: Psoríase; Lúpus eritematoso sistêmico; Doenças autoimunes.

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INTRODUCTION

Psoriasis is a chronic inflammatory disease that affects 1 to 3% of the world's population[1,2,3]. Most often the lesions are asymptomatic, but in some cases the disease may be more aggressive by developing erythroderma, generalized pustulosis, and even severe arthropathies, such as destructive and deferent seronegative polyarthritis[4]. Therefore, psoriasis can cause changes that significantly impact the patient's quality of life and self-esteem.

Systemic lupus erythematosus (SLE) is an autoimmune disease with a general prevalence ranging from 14.6 to 122 cases per 100,000 population[5,6]. The clinical features range from skin manifestations only, to systemic involvement, rapidly progressive and compromising several organs, mainly skin, joints, kidneys and brain[3,7].

Psoriasis has been described in association with other autoimmune diseases such as Hashimoto's thyroiditis, hemolytic anemia, Sjogren's syndrome et al.[2]. However, coexistence with Systemic Lupus Erythematosus is very rare. It is a diagnostic challenge - due to the common symptoms: cutaneous lesions and arthralgia - and therapeutic, especially in choosing an appropriate treatment that does not cause exacerbation of any of these diseases[1-5,8,9].

Zalla and Muller[4] identified 42 cases of SLE among 9420 patients with psoriasis in a 10-year retrospective study. They calculated the prevalence rate of psoriasis that coexists with SLE, reaching an estimated 1.1%, being slightly higher in females, due to the higher prevalence of SLE in this population group.

The mechanism of interaction between these diseases is unknown, however, an immunological deregulation and stimulation of T lymphocytes by superantigens seems to be the common factor mediating these diseases[2,10]. Mutations in the human leukocyte antigen (HLA) gene are associated with the onset of several diseases, including SLE and Psoriasis, which may be the cause of this concomitance[11]. However, both can arise independently in the same patient, without necessarily having a causal relation between them[1].

CASE REPORT

A 35-year-old woman, who had psoriasis vulgaris and psoriatic arthritis since the age of five, and the diagnosis confirmed by histopathological examination - performed in childhood and repeated at the present time (Figure 1). Acitretin and methotrexate have been tried over the years but have been suspended because of multiple side effects. As of 2015, it was observed worsening of arthralgia, especially after periods of sun exposure.

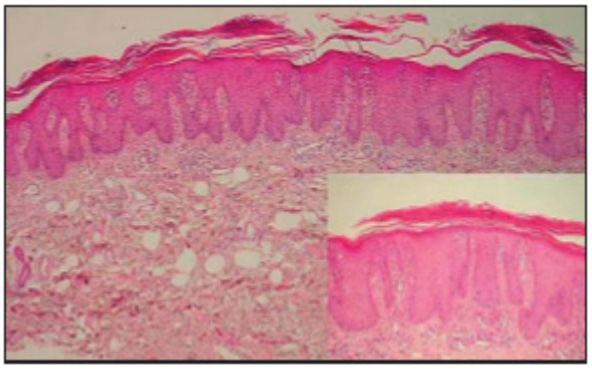

Figure 1. Epidermal hyperplasia, presence of paraceratosis and Munro microabscesses.

She was hospitalized in April 2017, due to fever, erythema malar, intense arthralgia and pleuritic pain (chest x-ray with pleural involvement) and examinations (Table 1).

Table 1. Exams requested during hospitalization (April / 2017).

EXAMS	RESULTS
Serum biochemistry	Normal
Hemoglobin:	10,7
Rheumatoid factor	0
FAN	Reagent for nucleus and nucleolus. Mixed fine nuclear type (1/1280). Nuclear (1/640).
Anti-SM	78,4 U/mL
Anti-Ro	Non-reactive
Anti-La	Non-reactive

Therefore, based on the criteria of the American College of Rheumatology (ACR) and Systemic Lupus International Collaborating Clinics (SLICC), the diagnosis of SLE was done and the treatment of the acute phase was started with prednisone 0.5 mg / kg / day, associated to Ciclosporin 200mg.

Days after discharge from the hospital, she attended our service, seeking follow-up of the psoriasis lesions and complaining of arthralgia. At the dermatological examination, we observed erythematous-scaling plaques with fissures in the lower limbs (pre-tibial and ankle mainly), dorsum of the hands and elbows.

Moisturizing agents (20% urea, 5% lactate, 10% lactic acid, 5% macadamia oil, 5% rosehip oil, creamy lotion qsp 80 ml) were prescribed and we started treatment for psoriatic arthritis with Adalimumab 40mg each two weeks.

In the return visit, after 60 days, we observed improvement of the psoriatic lesions, with no cracks. Patient also reported improvement of arthralgia.

DISCUSSION

The patient had a positive family history of psoriasis, with affected father and sister. We can observe a genetic character of this disease. Some studies suggest that the onset at an earlier age is related to a more severe course, refractory to treatment, with greater joint involvement and more relapses, generally having a relation with the mutation in the HLA gene[1,12].

In 2015, the patient began to develop photosensitivity, with aggravation of arthralgia following sun exposure. At this time, a possible diagnosis of SLE was not suspected due to the fact that the only new symptom was photosensitivity, since worsening of arthralgia could be easily attributed to psoriasis.

The diagnosis of the second autoimmune disease was only late established with the most severe manifestation of SLE - worsening of arthralgia, erythema malar, photosensitivity, pleuritic pain, FAN and anti-SM positive.

Besides the difficulty in diagnosis, this association also poses obstacles in relation to treatment. With the development of photosensitivity, related to SLE, one of the therapeutic options established for the control of psoriasis, phototherapy, was extinguished. Another problem is that psoriasis is aggravated by the use of antimalarials and systemic corticosteroids. These drugs are a great option for the treatment of SLE, and should therefore be avoided in the presence of this association.

We chose to perform the acute treatment of SLE with Prednisone to remove the patient from the crisis at low doses (0.5 mg / kg / day) in order not to aggravate psoriasis. We associate Ciclosporin 200 mg, an immunosuppressant that acts through the modulation of the T - cytokine lymphocytes involved in the pathogenesis of both diseases - obtaining an adjuvant benefit in the control of SLE and minimizing the exacerbations that the corticoid would cause in the psoriatic lesions. Another reason for choosing Ciclosporin is the fact that it is not a photosensitizing medicine, as it is with Methotrexate in some cases[1,7].

Maintenance therapy was performed with Adalimumab 40mg every two weeks, a drug that acts to neutralize the biological function of tumor necrosis factor alpha (TNF-alpha), present at high levels in the inflammatory and immune responses, generating benefit in the treatment of psoriatic lesions[13]. TNF-alpha is also found in high concentration in the synovial fluid, which reflects the beneficial effect of Adalimumab on blocking this cytokine, thus fighting arthralgia[11,13].

Indications of biological therapy for this patient are based on the fact that she has failed with classical systemic therapy and is a severe condition, with deterioration of the quality of life due to the intense arthralgia[14].

Furthermore, the choice for a biological treatment lies in the fact that greater treatment specificity, reduced immunotoxicity, and prolong remission are obtained[15].

The patient had a good response to Adalimumab treatment, reporting in a 60 day interval, a better control of psoriatic lesions and a significant reduction of arthralgia. He also mentioned an improvement in the quality of life, due to the presence of pain symptoms from the onset of psoriasis, at 5 years of age, aggravated later on with SLE and at the present moment, with minimal intensity.

Therefore, the present study aimed to inform the medical community about the unique characteristics of this coexistence, in order to strengthen the diagnostic capacity and avoid complications resulting from the opposite therapy of the diseases. Nevertheless, due to the limited number of psoriatic patients complicated with SLE, establishing a standard treatment for this association is extremely complex, since similar documented cases are minimal, which makes it difficult to know other therapeutic options.

REFERENCES

1. Silva RS, Nascimento LB, Bressan AL, Obadia D, Gripp AC. Psoríase fotossensível como um alerta para o diagnóstico de lúpus eritematoso sistêmico. Med Cutan Ibero Lat Am. 2014;10(3):46-9. Disponível em: http://www.medigraphic.com/pdfs/cutanea/mc-2014/mc141_3h.pdf.
2. Avriel A, Zeller L, Flusser D, Abu Shakra M, Halevy S, Sukenik S. Coexistence of psoriatic arthritis and systemic lupus erythematosus. Isr Med Assoc J. 2007;9(2):48-9. doi: 10.15761/ROM.1000105.
3. Kim EJ, Park HS, Yoon HS, Cho S. A case of psoriasis accompanied by systemic lupus erythematosus. J Turkish Acad Dermatol. 2015;27(3):347-8. doi: 10.5021 / ad.2015.27.3.347.
4. Zalla MJ, Muller SA. The coexistence of psoriasis with lupus erythematosus and other photosensitive disorders. Acta Derm Venereol Suppl (Stockh). 1996;195(2):1-15.
5. Millns JR, Muler SA. The coexistence of psoriasis and lupus erythematosus; an analysis of 27 cases. Arch Dermatol. 1980;116(6):638-63. doi: 10.1001/archderm.1980.01640300046015.
6. Conde SRSS, Silva MA, Fernandes GS, Vasconcelos HCB, Castelo VH. Estudo clínico-epidemiológico de pacientes com lúpus eritematoso sistêmico. Rev Virtual Sáude. 2009;6(2):1-5. doi: https://doi.org/10.14295/idonline.v11i38.954.
7. Sato EI, Bonfá ED, Costallat LTL, Silva NA, Brenol JCT, Santiago MB, et al. Lúpus eritematoso sistêmico: acometimento cutâneo/articular, Rev Assoc Med Bras, 2006;52(6):375-88. doi: http://dx.doi.org/10.1590/S0104-42302006000600012.
8. Hays SB, Camisa C, Luzar MJ. The coexistence of systemic lupus erythematosus and psoriasis. J Am Acad Dermatol.

1984; 10(4): 619–22. doi: https://doi.org/10.1016/S0190-9622(84)80267-4.

9. Baselga E, Puig L, Llobet J, Musulén E, Moragas JM. Linear psoriasis associated with systemic lupus erythematosus. J Am Acad Dermatol. 1994;30(2):130-33. doi: https://doi.org/10.1016/S0190-9622(08)81901-9.

10. Wielosz E, Majdan M, Zychowska I, Jeleniewicz R. Coexistence of five autoimmune diseases: diagnostic and therapeutic difficulties. Rheumatol Int. 2008;28(3):919-23. doi: 10.1007/s00296-008-0544-5.

11. Kulick KB, Mogavero HJ, Provost TT, Reichlin M. Serologic studies in patients with lupus erythematosus and psoriasis. J Am Acad Dermatol. 1983;8(5):631-4. doi: https://doi.org/10.1016/S0190-9622(83)70069-1.

12. Haroon M, Fitzgerald O. Pathogenetic overview of psoriatic disease. J Rheumatol Suppl. 2012;89(4):7-10. doi: https://doi.org/10.3899/jrheum.120232.

13. Gossec L, Smolen J, Viala CG. European League Against Rheumatism recommendations for the management of psoriatic arthritis with pharmacological therapies. Ann Rheum Dis. 2012;71(5):4-12. doi: 10.1136 / annrheumdis-2015-208337.

14. Cláudia PAM, Porro AM, Chaul A, Gripp A, Arruda ACB, Hirayam ALS, et al. Consenso Brasileiro de Psoríase: guia de avaliação e tratamento. Rev Bras Dermatol. 2012;172(2):134-65. Disponível em: https://docplayer.com.br/39214000-Psoriase-2012-consenso-brasileiro-de-sociedade-brasileira-de-dermatologia-guias-de-avaliacao-e-tratamento.html.

15. Grisar J. Biologicals and how they revolutionized rheumatology. Wien Med Wochenschr. 2015;165(2):1-2. doi: https://doi.org/10.1007/s10354-015-0343-z.

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