

## Erythrodermic psoriasis with regression after prophylaxis with isoniazid and antidepressant therapy - Case report \*

Psoríase eritrodérmica com regressão após profilaxia com isoniazida e terapia antidepressiva - Relato de caso

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**Abstract:** An 83 year old woman, exhibiting severe psoriasis, was treated conventionally (phototherapy, acitretin, and cyclosporine). After poor clinical results and significant changes in laboratory procedures, those treatments were suspended. She was then being prepared to be submitted to biological treatment, when preliminary results disclosed a 30mm PPD. Complete improvement occurred [only] after introducing prophylactic therapy for tuberculosis and anti-depressive medication.

**Keywords:** Acitretin; Antidepressive agents; Cyclosporine; Isoniazid; Psoriasis; Tuberculosis

**Resumo:** Mulher idosa apresentou psoríase em placas do tipo grave, com tendência eritrodérmica, e foi submetida a tratamento de acordo com o algoritmo consensual (fototerapia, acitretina, ciclosporina). Resultados clínicos insuficientes, recorrência e agravamento do quadro laboratorial orientaram no sentido da introdução de terapia biológica. A avaliação preliminar revelou PPD de 30mm. A resolução completa das lesões se verificou quando realizada profilaxia antituberculose e administrado antidepressivo.

**Palavras-chave:** Acitretina; Antidepressivos; Ciclosporina; Isoniazida; Psoríase; Tuberculose

### INTRODUCTION

Psoriasis is a chronic immunologic disease, with genetic background and inflammatory changes, which affects the skin, the cutaneous appendages and the joints. It afflicts approximately 2% of the world population and it causes significant psychosocial damage.<sup>1,2</sup> Bacterial infections, medications and emotional stress are among the triggering factors. Patients resistant to the classical treatment can be offered immune biological treatment, which can lead to the control of the process.<sup>3-8</sup> Tuberculosis is an infection that contraindicates the use of immune biological drugs and chemoprophylaxis can work by eliminating the probable triggering agent.

### CASE REPORT

White female, 83 years old, original from Ururui (SP), living in São Paulo, capital city, presented with disseminated erythematous-desquamative lesions (PASI = 7,2) for 18 months. The histopathological examination was compatible with psoriasis. She underwent phototherapy (PUVA and, afterwards, *narrow band* UVB, two sessions a week for 18 months), without significant improvement. She was then treated with acitretin (10mg/day), with marked improvement of the disease but with significant alterations of the hepatic enzymes. The drug was discontinued and she was treated with topical emollients and phototherapy (*narrow band* UVB). There was worsening

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**FIGURE 1:**  
Dissected erythematodesquamative plaques



**FIGURE 3:**  
After 90 days of treatment with isoniazid and sertraline



**FIGURE 2:**  
Extensive psoriatic eruption



**FIGURE 4:**  
After 90 days of treatment with isoniazid and sertraline

of the clinical status and rise of the PASI to 14.6 (Figures 1 and 2). Besides, she had a PPD of 16 mm, which prompted a pneumologic evaluation that did not disclose active tuberculosis. Eight months after the laboratory tests normalized treatment with cyclosporine (200mg/day) started and after five months there was an improvement of the PASI (4.8). Recurrence developed slowly with the gradual reduction of the cyclosporine (50mg/week), and the initial dose was reintroduced. The dermatosis was under control for ten months when there was an alteration of the renal function. Biological treatment was indi-

cated and the preconised screening tests revealed a PPD test of 30mm.

Active tuberculosis was excluded and prophylaxis with isoniazid, 300mg/day for six months began.<sup>1</sup> Simultaneously the patient's depressive status was treated with sertraline (50mg/day). After 90 days of treatment there was a complete regression of the disease (Figures 3 and 4), without recurrence over the subsequent months.

#### DISCUSSION

Psoriasis is a common disease, with a world

prevalence of around 2 to 3% and genetic predisposition, ambient aspects (traumas, lifestyle habits, and medications), infections and psychological stress are implicated on the development of the disease.<sup>9, 10, 11</sup> Treatment is individualized and should be based on the clinical presentation and severity of each case. Elimination of probable causative agents is essential and preliminary when planning the therapeutic options. Because of resistance and intolerance to conventional therapy of psoriasis, the immune biological drugs area an option capable of promoting the control of the disease, the social reinsertion and an improvement on the quality of life of the patients.<sup>12</sup> Tumor necrosis factor-alpha (TNF-alpha) has a central role on the physiopathology of cutaneous and arthropathic psoriasis and, at the same time, it is able to prevent primary infection of tuberculosis, avoid its reactivation and keep the causal agent latent.<sup>13-17</sup> There is

sufficient evidence that inhibitors of TNF-alpha are related to increased numbers of active tuberculosis.<sup>18, 19</sup> The possibility of reactivation of latent tuberculosis and rigorous screening on endemic areas should be considered.<sup>19-24</sup> Besides, tuberculinic turning is observed with treatment with cyclosporine, a drug capable of suppressing immunity and facilitating the reactivation of latent foci or even primary infection.<sup>22</sup>

On the present case the previous treatment with cyclosporine might have been responsible for the relative immunosuppression capable of reactivating a latent focus or facilitating the development of primary tuberculosis infection. The control of the latent infectious process with chemoprophylaxis thus resulted in an improvement of the severe psoriasis, and the control of the depressive status with medication might have had an additional impact. □

## REFERENCES

- Sociedade Brasileira de Dermatologia. Consenso Brasileiro de Psoríase 2009. 1th ed. Rio de Janeiro: Sociedade Brasileira de Dermatologia, 2009. p.5-115.
- Kılıç A, Güleç MY, Gül U, Güleç H. Temperament and character profile of patients with psoriasis. *J Eur Acad Dermatol Venerol.* 2008;22:537-42.
- Levine D, Gottlieb A. Evaluation and management of psoriasis: an internist's guide. *Med Clin North Am.* 2009;93:1291-303.
- Edlich RF, Fisher AL, Chase ME, Brock CM, Gubler KD, Long WB 3rd. Modern concepts of the diagnosis and treatment of psoriasis. *J Environ Pathol Toxicol Oncol.* 2009;28:235-40.
- Gottlieb AB, Kardos M, Yee M. Current biologic treatments for psoriasis. *Dermatol Nurs.* 2009;21:259-66.
- Guenther L, Langley RG, Shear NH, Bissonnette R, Ho V, Lynde C, et al. Integrating biologic agents into management of moderate-to-severe psoriasis: a consensus of the Canadian Psoriasis Expert Panel. *J Cutan Med Surg.* 2004;8:321-37.
- van de Kerkhof PC. The relevance of biologics for the treatment of patients with psoriasis. *Br J Dermatol.* 2009;161:1213-4.
- Alwawi EA, Krulig E, Gordon KB. Long-term efficacy of biologics in the treatment of psoriasis: what do we really know? *Dermatol Ther.* 2009;22:431-40.
- Gudjonsson JE, Elder JT. Psoriasis: epidemiology. *Clin Dermatol.* 2007;25:535-46.
- Puig-Sanz L. Psoriasis, a systemic disease? *Actas Dermosifiliogr.* 2007;98:396-402.
- Krueger G, Ellis CN. Psoriasis--recent advances in understanding its pathogenesis and treatment. *J Am Acad Dermatol.* 2005;53(Suppl 1):S94-100.
- Saini R, Tutrone WD, Weinberg JM. Advances in therapy for psoriasis: an overview of infliximab, etanercept, efalizumab, alefacept, adalimumab, tazarotene, and pimecrolimus. *Curr Pharm Des.* 2005;11:273-80. 13. Perlmutter A, Mittal A, Menter A. Tuberculosis and tumour necrosis factor-a inhibitor therapy: a report of three cases in patients with psoriasis. *Comprehensive screening and therapeutic guidelines for clinicians.* *Br J Dermatol.* 2009;160:8-15.
- Sfikakis PP. The first decade of biologic TNF antagonists in clinical practice: lessons learned, unresolved issues and future directions. *Curr Dir Autoimmun.* 2010;11:180-210.
- Tobin AM, Kirby B. TNF alpha inhibitors in the treatment of psoriasis and psoriatic arthritis. *BioDrugs.* 2005;19:47-57. 16. Kircik LH, Del Rosso JQ. Anti-TNF agents for the treatment of psoriasis. *J Drugs Dermatol.* 2009;8:546-59.
- de Felice C, Ardigo M, Berardesca E. Biologic therapies for psoriasis. *J Rheumatol Suppl.* 2009;83:62-4.
- Hernandez C, Cetner AS, Jordan JE, Puangsuwan SN, Robinson JK. Tuberculosis in the age of biologic therapy. *J Am Acad Dermatol.* 2008;59:363-80.
- Doherty SD, Van Voorhees A, Lebwohl MG, Korman NJ, Young MS, Hsu S, et al. National Psoriasis Foundation consensus statement on screening for latent tuberculosis infection in patients with psoriasis treated with systemic and biologic agents. *J Am Acad Dermatol.* 2008;59:209-17.
- Laffitte E, Janssens JP, Roux-Lombard P, Thielen AM, Barde C, Marazza G, et al. Tuberculosis screening in patients with psoriasis before antitumour necrosis factor therapy: comparison of an interferon-gamma release assay vs. tuberculin skin test. *Br J Dermatol.* 2009;161:797-800.
- Hanta I, Ozbek S, Kuleci S, Sert M, Kocabas A. Isoniazid intervention for latent tuberculosis among 86 patients with rheumatologic disease administered with anti-TNFalpha. *Clin Rheumatol.* 2007;26:1867-70.
- Ho VC. The use of ciclosporin in psoriasis: a clinical review. *Br J Dermatol.* 2004;150(Suppl 67):1-10.
- Bressan AL, Souto RS, Fontenelle E, Gripp AC. Imunossupressores na Dermatologia. *An Bras Dermatol.* 2010;85:9-22.
- Arruda LHF, Rodriguez SYSD, Gladys AM. Tratamento sistêmico da psoríase - Parte II: imunomoduladores biológicos. *An Bras Dermatol.* 2004;79:393-408.

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