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Pityriasis Lichenoides Chronica in a Patient With Ankylosing Spondylitis Treated With Etanercept

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ABSTRACT

Background: Pityriasis lichenoides chronica, a papulosquamous disorder often considered a subtype of pityriasis lichenoides. It is considered a clonal T-cell disorder, which may be associated with cutaneous T-cell lymphoma that may develops in response to foreign antigens.

Case Presentation: We present a 38-year-old male patient with ankylosing spondylitis who was on treatment with etanercept. After 8 weeks of treatment, the patient presented with scaly erythematous papules, on the back and arms. He was diagnosed clinically with pityriasis lichenoides chronica.

Conclusion: Pityriasis lichenoides chronica should be included among the broad clinical spectrum of chronic inflammatory skin diseases which may occur during treatment with TNF-alpha antagonists.

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Pityriasis lichenoides is an uncommon skin disorder with unknown etiology. It contains a range of clinical manifestations including acute papular lesions that quickly grow into pseudo vesicles and central necrosis to small, scaling, benign-appearing papules.[1,2] The tumor necrosis factor (TNF) superfamily of cytokines contain a group of pro-inflammatory cytokines that activate signaling pathways for cellular differentiation.[3,4] Etanercept, a TNF-α inhibitor is used as monotherapy or in combination with other immunosuppressants (such as methotrexate) to treat specific inflammatory diseases. This study presents a 38-year-old man with ankylosing spondylitis (AS) who developed pityriasis lichenoides chronica (PLC) during etanercept therapy.

Case Presentation

A 38-year-old male with back pain was referred to our outpatient clinic. He was started on NSAIDs on demand. Three years afterwards, he developed polyarthritis and tenosynovitis in the knees, hands, and feet. He was referred to a rheumatologist and he was found to be HLA-B27 positive, and pelvic radiographs showed bilateral grade 2 sacroiliitis. The Schober's test was positive and magnetic resonance imaging (MRI) showed inflammation of the sacroiliac joint. He was diagnosed with AS. Complete blood count, blood sugar, renal function tests, liver function tests, and urine routine were all within normal limits. Thyroid function was also normal. Psychiatric examination of the patient was unremarkable. There was no personal or familial history of arthritis. The patient did not present any comorbidity. Due to inefficacy of NSAIDs, etanercept 50 mg per week subcutaneously was prescribed. After eight weeks, he was evaluated by a dermatologist for the appearance of scaly erythematous papules, on the back and arms. A diagnosis of PLC was made (Figures 1 and 2). Treatment with daily topical corticosteroids was initiated. After one month of treatment, the rash decreased and treatment with etanercept was continued.

FIGURE 1. Scaly erythematous papules on the back.

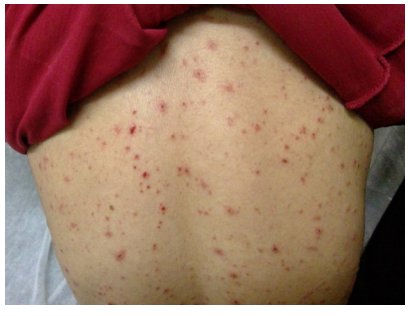

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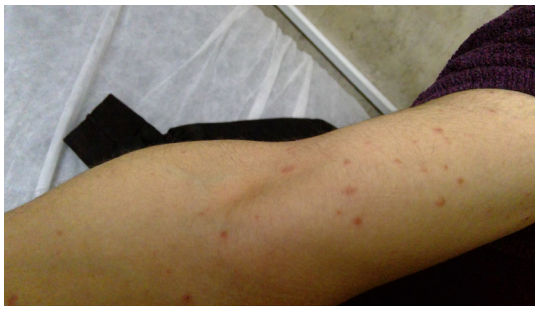
FIGURE 2. Small, scaling, raised papules on the arm.



DISCUSSION

Pityriasis lichenoides is a rare, idiopathic, acquired disease, characterized by groups of scaly erythematous papules that may persist for a long time. It is diagnosed by its appearance and clinical history and usually confirmed by histopathological examination. The span of the disease includes relatively mild chronic form to a more severe acute eruption. The mild chronic subtype, known as PLC is characterized by the slow development of small, scaling papules that spontaneously flatten and regress over a short period of time. At the other end of pityriasis lichenoides spectrum is the acute form known as pityriasis lichenoides et varioliformis acuta (PLEVA), characterized by the abrupt eruption of small scaling papules that progress into blisters and crusted red-brown spots. The pathology of both PLEVA and PLC is distinctive. There is limited data on efficacy of successful treatment for PLC. PLC has been reported during treatment with TNF-alpha blockers, including infliximab,[5,6] adalimumab,[7,8] etanercept.[9] Most of these cases were successfully treated with methotrexate. Only one case of PLC has been reported during treatment with etanercept in a patient with rheumatoid arthritis. PLC improved with the use of topical steroids without the necessity of discontinuing treatment, as observed in our patient. Since high levels of TNF-alpha have been detected in PLEVA, TNF-alpha blockers have been hypothesized as potential therapy of this condition. Indeed, etanercept was found effective by Nikkels et al in a patient with a multiresistant PLC, but relapse was observed after drug withdrawal.[10]

CONCLUSION

Our case completely improved with topical steroid usage and remission of AS was observed with continued etanercept treatment. PLC may be another possible cutaneous adverse reaction of TNF-alpha antagonists. However, further studies are recommended to validate these findings and consider PLC as adverse effect to this class of drugs.

DISCLOSURES

The authors declare no conflict of interest.

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