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TB OR NOT TB? CUTANEOUS INFECTION IN A PATIENT WITH RHEUMATOID ARTHRITIS TREATED WITH ABATACEPT

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BACKGROUND

Patients with rheumatoid arthritis (RA) who benefit from biological immunosuppressants (bDMARD) as tumor necrosis factor inhibitors (TNFi) and others, such as abatacept (ABA), a selective T cell co-stimulation modulator, are more prone to infections, such as tuberculosis (TB). This being the most incident among TNFi users. This case report addresses the reactivation of TB in its cutaneous form in a patient being treated with ABA.

CASE REPORT

R.F., 65 years old, with pulmonary TB treatment from September 1995 to March 1996, diagnosed with RA in 2013, presented therapeutic failure with methotrexate and leflunomide, underwent screening for latent TB infection (LTS), with tuberculin skin test (PPD) and chest X-ray negative, golimumab, TNFi, initiated in December 2014. In 2015, due to poor clinical response, he had switched treatment. It was performed a new LTS, again negative, and, in October 2015, he initiated treatment with ABA and evolved with low disease activity of RA. He had some infectious complications, the last of which was cellulite in the right lower limb in March of 2018, without regular use of ABA (last dose in February of 2018). He developed skin lesions on all 4 limbs. These were erythematous papules that evolved into pustules (Fig. 1) that ruptured and had a necrotic center (Fig. 2); they were symmetrical and located on the extensor surfaces of the affected limbs, as well as knees, elbows and instep. The biopsy of the lesions showed an inflammatory infiltrate of lymphoplasmohistiocytes, with areas of caseous necrosis and acid-fast bacilli, among other findings, suggestive of cutaneous mycobacteriosis. On 08/12/18, treatment with rifampicin, isoniazid, pyrazinamide and ethambutol was started with significant improvement of the lesions.

Figure 1. Erythematous papules that evolved into pustules.

Figure 2. Ruptured erythematous papules that evolved into pustules with a necrotic center.

CONCLUSION

The reactivation of cutaneous TB in patients with RA is more reported in TNFi users than in ABA users, since TNF is important in the immune response against *Mycobacterium tuberculosis*: it increases the phagocytosis of macrophages, the destruction of the pathogen, formation granuloma and prevention of systemic spread of infection. Thus, the use of TNFi in patients with RA increases the risk of TB, although all pivotal trials that included patients using abatacept were screened and treated for latent TB. Latent TB infection must be performed before using bDMARDs and it is of great importance due to the prevalence of TB in Brazil, but despite its effectiveness, we should never let our guard down for infections like TB.