DRUG-INDUCED SYSTEMIC LUPUS ERYTHEMATOSUS

Romano Bezerra Brasileiro¹, Priscila Garcia Câmara Cabral Tavares¹, Francisco Helialdo Sousa de Oliveira Filho¹, Priscila Dourado Evangelista^{1,*}

1.Hospital Geral Dr. César Cals, Fortaleza (CE), Brazil.

*Corresponding author: prisdourado@yahoo.com.br

BACKGROUND

Tumor necrosis factor alpha (TNF- α) is a pro-inflammatory cytokine implicated in the pathogenesis of several autoimmune and rheumatic diseases. Tumor necrosis factor alpha antagonists were developed more than a decade ago and have shown increasing success in controlling chronic inflammatory diseases. However, blocking the physiological effect of TNF- α has led to adverse effects in some patients, with adalimumab, etanercept, and infliximab being the most implicated in the drug-induced lupus syndrome.

CASE REPORT

Female, 59 years old, carrier of rheumatoid arthritis (rheumatoid factor positive and anti-ANA negative) diagnosed more than 10 years ago. Patient has been taking adalimumab for approximately 5 years. In October 2020, she reported the appearance of erythematous plaques on the scalp with areas of cicatricial alopecia. In addition, she started presenting bullous lesions on her upper limbs and chest region. A scalp skin biopsy showed a mildly active, chronic, vacuolar dermatitis compatible with discoid lupus erythematosus. The new ANA result was 1:640 homogeneous punctation. Adalimumab was discontinued and topical corticosteroid was prescribed with improvement of skin lesions, with persistence of areas of cicatricial alopecia in scalp region. In May 2021, anti-ANA and anti-DNA were negative.

CONCLUSION

Drug-induced lupus syndrome is a rare condition and is estimated to occur at a rate between 0.5 and 1%. Etanercept and infliximab are the two most common causative agents. Adalimumab has been less associated, being less immunogenic because it is a fully humanized monoclonal antibody. The onset of lupus symptoms after starting TNF- α inhibitors ranged from 10 days to 54 months. It is well documented that adalimumab, etanercept and infliximab can induce autoantibodies. Positive antinuclear antibodies range from 79–100% and anti-dsDNA antibodies are found in 72–92%. In almost all cases, the symptoms of the syndrome subside when the drug is stopped. The time to symptom resolution ranges from three weeks to six months. Most patients have normalization or decrease in their autoantibody levels. Some require additional treatment to fully resolve their symptoms, depending on the severity of the presentations. Between 36 and 71% of patients required corticosteroids given intravenously, orally, or topically, and 12% of patients required additional immunosuppressive therapy, including azathioprine, cyclophosphamide, leflunomide, methotrexate or mycophenolate.

KEYWORDS

Systemic lupus erythematosus, Adalimumab, Drug-induced.