Letters

OBSERVATION

Treatment With Anifrolumab for Discoid Lupus Erythematosus

Discoid lupus erythematosus (DLE) is a challenging manifestation in systemic lupus erythematosus that is associated with an increased risk of disfigurement and poor quality of life. Anifrolumab (ANI) is a human monoclonal antibody directed against the interferon α receptor 1; data from randomized clinical trials showed a cutaneous response rate achieved by 42% to 49% of patients in the ANI group and 25% in the placebo group. To our knowledge, its effectiveness in real life and in different types of skin lesions has yet to be determined. In this article, we describe 2 cases of severe and refractory DLE treated in our department with ANI, 300 mg, every 4 weeks.

Report of Cases | Before each infusion, cutaneous manifestations were assessed using the Cutaneous Lupus Erythematosus Disease Area and Severity Index (CLASI), a validated measure of skin disease severity in terms of activity (CLASI-A, score 0-70) and damage (CLASI-D, score 0-56). Articular involvement was evaluated with the joint count (tender joints [TJs] and swollen joints [SJs]) and global disease activity with the Systemic Lupus Erythematosus Disease Activity Index 2000 (SLEDAI-2K). The self-reported effect of systemic lupus erythematosus and DLE was assessed with the Lupus Impact Tracker (LIT) and Skindex-16, respectively.

Case 1. Patient 1 (Figure 1) was a 31-year-old woman with a history of relapsing-remitting arthritis, chronically active chilblain lupus, and disseminated DLE despite the use of high-dose glucocorticoid, antimalarials, and conventional and biological immunosuppressants. A transient improvement was only observed with treatment with oral cyclophosphamide. In January 2022, treatment with ANI was initiated in combination with methotrexate,
7.5 mg per week, and prednisone, 5 mg, daily. During follow-up, we observed a clinically significant improvement of arthritis (from $T_j = 10$ and $S_j = 2$ at baseline to $T_j = 0$ and $S_j = 0$ in 8 weeks), global disease activity (SLEDAI-2K from 13 to 2 in 24 weeks), size and appearance of active skin lesions and patchy alopecia (CLASI-A from 26 to 3 in 20 weeks (“T” indicates the time of evaluation in weeks): $T_0 = 26$, $T_4 = 12$, $T_8 = 9$, $T_12 = 9$, $T_20 = 3$, $T_{24} = 3$, $T_{28} = 2$, and $T_{32} = 1$) (Figure 1), and quality of life (Skindex-16 score from 100 to 60.41 and LIT score from 60 to 25 in 32 weeks). The CLASI-D score remained stable over time. After the second infusion, the patient, who was vaccinated with a second dose of a COVID-19 messenger RNA vaccine 4 months earlier, developed mild symptoms of COVID-19 (cough) that resolved in few days.

Case 2. Patient 2 (Figure 2) was a 59-year-old woman with a long-standing history of DLE and chronic scarring alopecia. Treatment with topical glucocorticoid and docetaxel, doxorubicin hydrochloride, and cyclophosphamide; antimalarials; conventional immunosuppressants; and Janus kinase inhibitors was either ineffective or not tolerated. Treatment with ANI was initiated and yielded rapid improvement of active cutaneous lesions; her CLASI-A score decreased from 24 to 5 after 1 infusion, and the effect was maintained throughout the treatment period ($T_0 = 24$, $T_4 = 5$, $T_8 = 6$, and $T_{12} = 5$). Her CLASI-D, LIT, and Skindex-16 scores did not vary considerably over time (CLASI-D, $T_0$ and $T_{12} = 18$; LIT, $T_0 = 65$, $T_{12} = 62.5$; Skindex-16, $T_0 = 85.4$, $T_{12} = 79.15$). Her SLEDAI-2K score decreased from 4 to 2 in 4 weeks due to improvement of acute hair loss.

Discussion | In conclusion, in a real-life setting, treatment with ANI yielded rapid improvement of discoid lesions with good tolerability. The effect was maintained over time, and the patients did not experience any disease flares. To our knowledge, this is the first description of treatment with ANI for real-life DLE. Although this article covered a limited number of cases and a brief time span, the results are encouraging and potentially support the use of ANI in this type of skin manifestation.
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