GENERAL FEATURES AND OUTCOMES OF ADULT PATIENTS WITH DERMATOMYOSITIS: A PROSPECTIVE ONE-CENTER COHORT STUDY

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BACKGROUND

Currently, studies that have prospectively analyzed a large sample of patients with dermatomyositis (DM) are scarce. The majority of available studies about DM are based on case reports, case series, and retrospective cohorts, or they included different types of myositis or probable/possible DM. Therefore, we aimed to assess a large sample of patients with defined DM prospectively.

METHODS

This prospective, one-center cohort study included 91 adults with defined classical DM (EULAR/ACR 2017) who have been followed up in our outgoing clinic since 2012. Patients with overlapping syndromes or clinically amyopathic DM were excluded. Autoantibodies were assessed by immunoblotting antibody assay.

RESULTS

The mean age of patients was 47.3 ± 15.4 , 67.0% were women, and 81.3% were white. The median follow-up time was 44 (IQR 17–67) months, and 82.4% of patients attended their follow-up appointments. As initial treatment, 22.2% of patients received methylprednisolone pulse therapy (3–5 g), received 4.4% intravenous immunoglobulin, and 54.9% received both drugs. Currently, 67.0% of patients are under immunosuppressive drugs or rituximab, and 33.0% are still taking glucocorticoid (median dose of 15 [7.5–40] mg/day). One-third of patients had disease remission, 48.4% had complete clinical response, and 18.7% saw continued disease activity. Concerning comorbidities, 46.7% of patients had arterial hypertension, 20.0% had diabetes mellitus, and 4.4% had myocardial infarction. During follow-up, 102 infections occurred in 48 patients (15 pneumonia, 11 zoster, 5 tuberculosis, 3 COVID-19, and 68 others). Malign neoplasia was identified in 22 cases (8 cases before, 10 during, and 3 after DM diagnosis). The most common was breast cancer ($n = 9$) followed by 4 gastric, and 2 lung cancers. In total, 9.9% of patients died (sepsis, pneumonia, and neoplasia). We observed 13.5% anti-Mi-2, 13.5% anti-Jo-1, 12.2% anti-MDA-5, 9.5% anti-TIF1, 6.8% anti-NXP-2, 8.1% anti-SAE, 2.7% anti-PL7, 1.4% anti-PL-12, 1.4% anti-SRP, and 35.1% anti-Ro-52, and 5.5% anti-PM/Scl, and no cases of anti-Ku, anti-EJ, and anti-OJ. ANA was present in 83.8% of the cases. Only moderate correlation was seen among anti-Jo-1 and lung involvement. Fair correlations were observed among anti-TIF-1 and the risk of pneumonia and neoplasia, anti-Mi-2 and increase of muscle enzymes, and anti-MDA-5 with cutaneous ulcers and vasculitis.

CONCLUSION

This study presents the general profile of Brazilian patients with DM. Most patients received both methylprednisolone pulse therapy and intravenous immunoglobulin, which may have contributed to the favorable outcome for almost half of them. Notwithstanding, the prevalence of infections and cardiovascular diseases was high.

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KEYWORDS

Dermatomyositis, Autoantibodies, Treatment.