COEXISTING CENTRAL AND PERIPHERAL NERVOUS SYSTEM MANIFESTATIONS IN LONGSTANDING SYSTEMIC LUPUS ERYTHEMATOSUS

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BACKGROUND

Systemic lupus erythematosus (SLE) is a chronic systemic autoimmune disease characterized by autoantibody production and immune complex formation. It can affect any organ, including the nervous system. Incidence and prevalence of neurologic and psychiatric symptoms among patients with SLE vary greatly due, in large part, to heterogeneity in definitions and methodology. Neuropsychiatric events may precede, occur concomitantly with, or follow the diagnosis of SLE.

CASE REPORT

A 49-year-old woman with diagnosis of SLE (nuclear homogeneous pattern on ANA, arthritis, malar rash, discoid lupus, anti-dsDNA, leukopenia, low complement levels) since 1999 using currently azathioprine (1 mg/kg/day) due to the absence of recent symptoms. She was not using hydroxychloroquine (suspended due to maculopathy) or corticosteroid therapy. In September 2020 the patient presented palpebral ptosis in the right eye, lateral globe deviation to the right, diplopia and pain in lower limbs with neuropathic characteristics. She also presented worsening of arthralgia, mainly in wrists, shoulders, elbows and ankles. Laboratory exams showed high inflammatory tests (ESR of 120 mm/h and CRP of 140 mg/L), complement consumption (C3 and C4), anti-DNA 1/640 and lymphopenia. No changes in urinary sediment or renal function. Assessed by neurology, which diagnosed third cranial pair paralysis through physical examination. Cerebrospinal fluid analysis (increased cellularity with a predominance of lymphocytes, cerebrospinal fluid and IgG > 4 times the upper limit of normality, negative cultures) was suggestive of aseptic meningitis. Transthoracic echocardiogram, carotid Doppler ultrasound, cranial and spinal resonance without abnormalities. Electroneuromyography was performed and showed mononeuritis multiplex (involvement of tibial and fibular nerves). The patient received methylprednisolone (total of 5 g) and cyclophosphamide 0.75 g/m² per month. While CNS manifestations resolved completely, the patient maintained pain due to PNS involvement, and symptomatic treatment with gabapentin was introduced.

CONCLUSION

Coexisting central and peripheral nervous system manifestations in longstanding SLE is rare. While CNS manifestations resolved with immunosuppression, PNS manifestations persisted and were associated with increased morbidity.

KEYWORDS

Systemic lupus erythematosus, Central nervous system, Peripheral nervous system.