Estudio de caso basado en el análisis sindrómico del funcionamiento neuropsicológico en una paciente con Nefritis Lúpica clase IV

Nombres y apellidos

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RESUMEN

Introducción: El Lupus Eritematoso Sistémico (LES) es una enfermedad autoinmune que puede comprometer el sistema nervioso central, generando alteraciones neuropsicológicas que afectan significativamente el funcionamiento cotidiano de quienes la padecen (Schwartz et al., 2019). El análisis sindrómico propuesto por A. R. Luria (1973, 1980) constituye una forma precisa de evaluar y comprender clínicamente los procesos mentales del ser humano, en relación con diversos dominios cognitivos como la atención, la memoria y las funciones ejecutivas (Ardila & Rosselli, 2019). Dentro de las manifestaciones más severas del LES, la Nefritis Lúpica (NL) Clase IV se asocia con mayor riesgo de complicaciones sistémicas y compromiso neurológico; sin embargo, la caracterización neuropsicológica en este grupo de pacientes especialmente en población joven ha sido limitada en la literatura científica y resulta prácticamente inexistente en el contexto colombiano (Seet et al., 2021; Raghunath et al., 2022). **Objetivo:** Caracterizar el funcionamiento neuropsicológico de una paciente de 30 años, diagnosticada con NL Clase IV y con manifestaciones a nivel del sistema nervioso central, mediante un análisis sindrómico de sus hallazgos cognitivos, conductuales y de neuroimagen. **Metodología:** Se empleó un diseño de estudio de caso único, descriptivo, de tipo intrínseco (stake, 1995; yin, 2014), mediante el análisis sindrómico propuesto por a. R. Luria (1973, 1980), con imágenes de resonancia magnética cerebral y, de manera psicométrica, con una batería neuropsicológica exhaustiva compuesta por el wais-iv, el moca, el neuropsi-3, el banfe-3, el test de clasificación de tarjetas de wisconsin (wcst), el test de stroop, el trail making test (tmt a-b), la figura compleja de rey-osterrieth y el inventario de depresión de beck (bdi-ii). **Resultados:** Los resultados describen un síndrome disejecutivo fronto-subcortical de predominio izquierdo, con compromiso predominante en la velocidad de procesamiento, la atención sostenida y dividida, la memoria

episódica y las funciones ejecutivas, producto de una pérdida de volumen en el ganglio basal y el valle silviano izquierdo, con colpocefalia frontal, e hiperintensidades difusas de la sustancia blanca compatibles con microangiopatía crónica (fazekas 1), sin evidencia de daño hipocampal.

Conclusiones: La NL clase iv puede cursar con un perfil neuropsicológico específico de disfunción fronto-subcortical, consistente con los mecanismos neuroinflamatorios y vasculopáticos descritos para el compromiso neuropsiquiátrico del les (azizi et al., 2025; makdad najeeb et al., 2025). Esto resalta la importancia de incorporar la evaluación neuropsicológica de rutina en el manejo interdisciplinario de pacientes jóvenes con nl, incluso en ausencia de sintomatología depresiva. La descripción de este caso sugiere un síndrome disejecutivo fronto-subcortical, pero cada caso debe observarse de manera individual, con el fin de analizar las características particulares que se presenten en cada paciente.

Palabras clave: Nefritis lúpica, neuropsicología, análisis sindrómico, lupus eritematoso sistémico, deterioro cognitivo, funciones neuropsicologicas.

ABSTRACT

Introduction: Systemic Lupus Erythematosus (SLE) is an autoimmune disease that can affect the central nervous system, producing neuropsychological alterations that significantly impact patients' daily functioning (Schwartz et al., 2019). The syndromic analysis proposed by A. R. Luria (1973, 1980) constitutes a precise way of clinically evaluating and understanding human mental processes in relation to various cognitive domains such as attention, memory, and executive functions (Ardila & Rosselli, 2019). Among the most severe manifestations of SLE, Class IV Lupus Nephritis (LN) is associated with a higher risk of systemic complications and neurological involvement; however, neuropsychological characterization in this population particularly among young patients remains limited in the scientific literature and is virtually absent in the Colombian context (Seet et al., 2021; Raghunath et al., 2022). **Objective:** To characterize the neuropsychological functioning of a 30-year-old patient diagnosed with Class IV LN and central nervous system involvement, through a syndromic analysis of her cognitive, behavioral, and neuroimaging findings. **Methodology:** An intrinsic, descriptive single-case study design was used (stake, 1995; yin, 2014), through the syndromic analysis proposed by a. R. Luria (1973, 1980), with brain magnetic resonance imaging and, psychometrically, with a comprehensive neuropsychological battery comprising the wais-iv, moca, neuropsi-3, banfe-3, the wisconsin card sorting test (wcst), the stroop test, the trail making test (tmt a-b), the rey-osterrieth complex figure, and the beck depression inventory (bdi-ii). Results: The results describe a fronto-subcortical dysexecutive syndrome with left-sided predominance, with predominant compromise in processing speed, sustained and divided attention, episodic memory, and executive functions, resulting from volume loss in the left basal ganglia and Sylvian fissure, with frontal colpocephaly, and diffuse white matter

hyperintensities consistent with chronic microangiopathy (Fazekas 1), with no evidence of hippocampal damage. **Conclusions:** Class IV LN can present with a specific neuropsychological profile of frontosubcortical dysfunction, consistent with the neuroinflammatory and vasculopathic mechanisms described for neuropsychiatric involvement in SLE (Azizi et al., 2025; Makdad Najeeb et al., 2025). This underscores the importance of incorporating routine neuropsychological assessment into the interdisciplinary management of young patients with LN, even in the absence of depressive symptoms. This case description suggests a fronto-subcortical dysexecutive syndrome, but each case should be examined individually, in order to analyze the particular characteristics present in each patient.

Key Words: Lupus nephritis, neuropsychology, syndromic analysis, Neuropsychological functions, systemic lupus erythematosus, cognitive decline.

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