




Personality alterations in systemic lupus erythematosus identified by psychiatric and psychological assessment

Anett Pintér¹, Nikoletta Bódi¹, Noémi Császár-Nagy^{2,3} , Viktória Varga¹, Zsuzsanna Helyes^{4,5} , György Nagy^{1,5} 

¹Department of Rheumatology and Clinical Immunology, Semmelweis University, Budapest, Hungary

²Psychosomatic Outpatient Clinic, Budapest, Hungary

³University of Public Service, Budapest, Hungary

⁴Department of Pharmacology and Pharmacotherapy, University of Pécs, Hungary

⁵HUN-REN-PTE Chronic Pain, Research Group, Pécs, Hungary

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Introduction: Systemic lupus erythematosus (SLE) is a complex, multisystem autoimmune disorder that is frequently associated with psychological and cognitive disturbances. Depression, fatigue, and anxiety occur considerably more often among individuals with SLE than in the general population; however, the mechanisms underlying these manifestations remain insufficiently understood.

This study aims to examine the personality profiles of patients with SLE using a comprehensive, multidimensional assessment that integrates clinical, psychological, and biological perspectives.

Material and methods: The current cohort consists of 11 SLE participants and 10 age- and sex-matched healthy controls. Participants went through a detailed assessment process that included a clinical evaluation, psychological assessment, and a psychiatric examination, as illustrated in Figure 1.

Results: Psychological and psychiatric assessments suggest that mental health changes in SLE are heterogeneous and multidimensional, frequently overlapping with neuropsychiatric manifestations of the disease and thereby complicating differential diagnosis. Psychological evaluation identified emotional restriction, difficulties with interpersonal attachment, increased level of anxiety and depressive symptomatology, self-destructive ideations, and indications of delayed psychological development across the SLE group. Furthermore, DSM-5-based psychiatric diagnoses were established for all patients with SLE. Within the spectrum of DSM-5 personality disorders, traits aligning predominantly with Cluster B features – particularly schizoid patterns – were more evident in a subset of patients. The distribution of these psychiatric diagnoses is illustrated in Figure 2. Regarding cognitive functioning, “brain fog” emerged as the most prominent complaint, associated

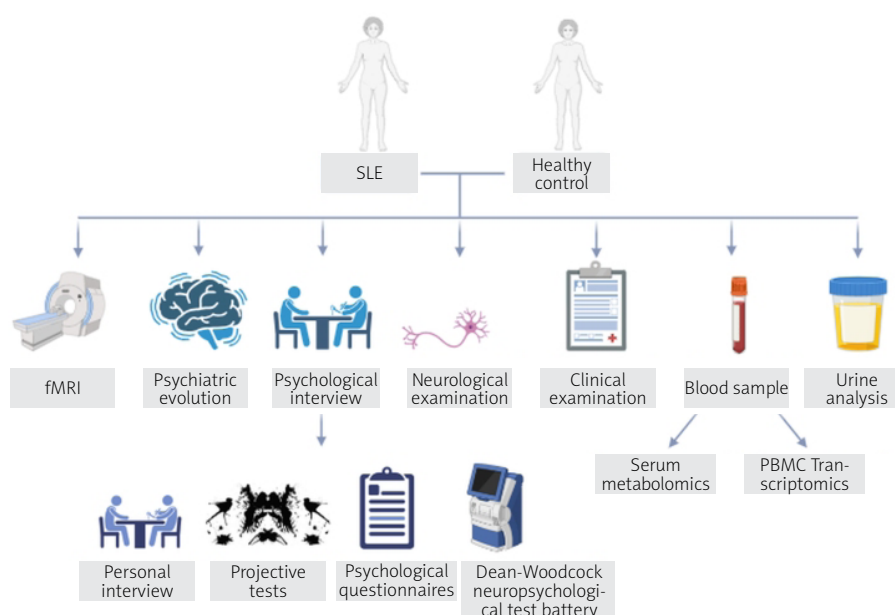


Fig. 1. Study design. Participants with systemic lupus erythematosus (SLE) and healthy controls were enrolled and underwent a comprehensive evaluation including neuroimaging (fMRI), psychiatric and psychological assessments, and neurological and clinical examinations. Psychological evaluation involved personal interviews, projective tests, and standardized questionnaires, complemented by the Dean-Woodcock neuropsychological test battery. In parallel, blood samples were collected for molecular analyses, including serum metabolomics and PBMC transcriptomic profiling.

with subjective memory difficulties, diminished attention, and slower information processing.

Discussion: The findings suggest that psychological functioning in SLE is complex and influenced by interacting biological and psychosocial factors. The observed personality features and psychiatric comorbidities may both reflect and contribute to the challenges of living with a chronic autoimmune disease.

Conclusions: Personality patterns observed in SLE appear diverse and likely arise from multifactorial interactions involving autoimmune activity, psychosocial stressors, and neuropsychiatric symptoms. Improved recognition of personality patterns specific to SLE may facilitate more precisely targeted psychological interventions and enable personalized long-term management strategies for affected individuals.

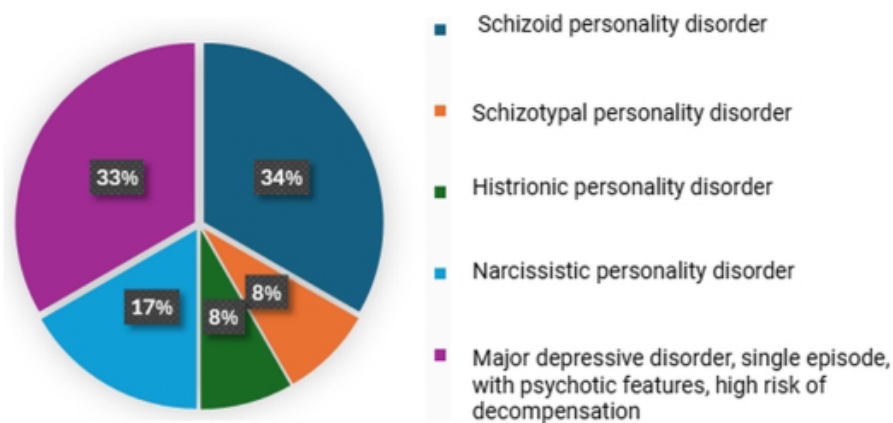


Fig. 2. Distribution of psychiatric diagnoses among patients with SLE. The pie chart depicts the prevalence of DSM-5-based psychiatric diagnoses identified in the SLE cohort. Schizoid personality disorder was the most frequent (34%), followed by major depressive disorder, single episode, with psychotic features and high risk of decompensation (33%), narcissistic personality disorder (17%), and schizotypal and histrionic personality disorders (8%).