

## 7. NEUROLOGICAL IMPAIRMENT IN SYSTEMIC LUPUS ERYTHEMATOSUS



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**Introduction.** SLE is a multifactorial autoimmune disease of unknown etiology, which is characterized by a diverse multisystemic effect that appears as the result of certain imperfect immunoregulatory processes.

**Aim of study.** Identifying the main neurological manifestations in patients with SLE.

**Methods and materials.** In order to identify suggestive articles, databases such as PubMed, Google Scholar, HINARY, Medscape and Scopus were studied and analyzed according to the keywords „SLE”, „neurological manifestations”.

**Results.** Neurological impairment is widespread among patients with SLE, both central nervous system (CNS) and peripheral nervous system (PNS) being affected. Among the main manifestations of SLE patients, the following are established: persistent headache, psychoses, paresthesia, anxiety disorders, depression, various forms of neuropathies such as sensorimotor neuropathy, cranial neuropathy, polyneuropathies. The most eloquent neurological manifestation in patients with SLE proved to be cognitive impairment. The mechanism that reflects the essence of cognitive deficiency is not entirely uncovered, but one cause would be the effect mediated by the autoantibodies. Cognitive changes in patients with SLE can be temporary and their substrate is poorly defined. Currently, both corticosteroids and NMDA-receptors have not been proved to be effective in improving cognitive function in SLE.

**Conclusions.** The identification and evaluation of neurological manifestations in SLE patients requires increased and continuous clinical monitoring. It is essential to pay attention to the triggering factors of the disease, in order to manage forward treatment strategies.