Central Nervous System Involvement in Systemic Lupus Erythematosus

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Abstract

Systemic Lupus Erythematosus (SLE) is a complex clinical syndrome which its components are less clearly recognized and includes heterogeneous demonstrations engaging both central and peripheral nervous system along with disabling effects. This disease is called “thousand faces” due to these heterogeneous demonstrations. This gap exists while 75% of adults and children with SLE may deal with its nervous demonstrations and experience disability during disease period. Different factors contribute to the body’s immunity performance disorder including genetic, hormonal and environmental factors. However, disposing factors leading to nervous demonstrations in some patients are not clearly understood. Today, Lupus nervous involvement is considered as “the most clinical challenging ‘visceral’ involvement,” “causes high morbidity and mortality” and put a “heavy financial and economic and social burden on the society”. Lupus nervous involvement covers a wide range of clinical demonstration intensity. NPSLE was first described by Morris Kaposi in 1872. In 1999, ACR attempted to name and define neuro-psychotic syndromes recognized in SLE. Different CNS demonstrations of Lupus are investigated in this paper. Neurologic demonstrations of focal SLE, mostly the secondary ones, as vascular events is due to anti-phospholipid antibody. These demonstrations are usually acute and resist against treatment at first and can be accompanied by structural abnormalities in autopsy while pathogenesis mechanism of CNS demonstrations is less recognized and these demonstrations are harmful and develop slowly; they are reversible after treatment and usually not accompanied by structural pathology. Although headache and mood disorders are common neurologic complains of patients with SLE, seizure, brain vessel disease, acute confusional state, and neuropathy are the most common syndromes related to SLE. CNS demonstrations of SLE patients include: Cerebrovascular disease, Seizure, Myelopathy, Lupus psychosis, acute confusional state, Cognitive dysfunction, Movement disorder, Aseptic meningitis and demyelinating syndrome.

Keywords: Central nervous system, Systemic lupus erythematosus, Neuropsychiatric symptoms

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