The necessity of stroke prevention in patients with systemic lupus erythematosus

Sir,

Systemic lupus erythematosus (SLE) is a chronic autoimmune disease affecting multiple organs of the body.[1] Central nervous system (CNS) involvement has been considered one of the severe complications of SLE, which increases both morbidity and mortality rate in patients with SLE.[2,3] Histopathologic and radiological studies demonstrated various brain abnormalities in patients with SLE, such as micro and macroinfarcts, cortical atrophy, parenchymal hemorrhage and

demyelination.[1] These cerebral changes may present with headache, seizure, psychosis, cranial neuropathy and cerebrovascular attack (CVA).[1]

CVA is an ominous event in SLE. About 3-20% of patients with SLE may experience an episode of stroke at some point during their course of disease.[4,5] This event may be in the ischemic or hemorrhagic form. Occurrence of stroke in patients with SLE may reflect the influence of different factors such as hypercoagulable state, hypertension, cerebral vasculopathy, atherosclerosis, thrombosis, and emboli of Libman-Sacks endocarditis.[3,6,7]

Some studies have implied that common cardiovascular risk factors cannot obviously explain accelerated rate of stroke in patients with SLE.[8] However, in our practice, we encounter some factors which may predict or contribute in stroke in patients with SLE. These factors include presence of antiphospholipid antibodies, a history of systemic thrombosis, renal involvement with SLE, and also presence of Framingham cardiovascular risk factors.

It has been demonstrated that the risk for stroke in SLE is markedly higher among young patients.[6] Moreover, presence of joint diseases, co-existing neuro-psychiatric disorders and the rate of stroke recurrence are the factors which restrain the recovery process and harden the rehabilitation. Therefore, stroke in SLE may hold more extended morbidities and impose great psychological and social burden.

Previous studies revealed that stroke in SLE have a significant tendency to occur early in the course of SLE. [9] In fact, most cases of stroke in SLE occurred in first 5 years of the disease, particularly during the first year.[4,5] This point puts emphasize on the importance of initiation of stroke prevention at the time of diagnosis of SLE.

Stroke prevention in SLE has different aspects. A valuable achievement is eliminating or controlling the risk factors which are contributing to the atherosclerotic process.[10] It is suggested to assess the presence of hypertension, hyperlipidemia, obesity, diabetes mellitus and smoking in the first visits of patients with SLE.

Since low dose aspirin may reduce the risk of stroke in some patients with SLE,[5] it is beneficial to recommend it for all new cases of SLE and patients in high risk groups. Anticoagulants are in the first line of stroke prevention in the patients with a history of systemic thrombosis. Several studies have revealed the effects of anticoagulants in the prevention of both occurrence and recurrence of ischemic stroke in high risk groups.[5]

In conclusion, regarding to the higher risk of various subtypes of stroke in young patients with SLE, stroke prevention should be an early purpose and essential component of therapeutic strategies in patients with SLE.

Mohammad Saadatnia, Zahra Sayed-Bonakdar[1], Ghasem Mohammad-Sharifi, Amir Hossein Sarrami
Isfahan Neurosciences Research Center, [1]Department of Rheumatology, Isfahan University of Medical Sciences, Isfahan, Iran

Address for Correspondence:
Dr. Amir Hossein Sarrami, Alzahra Hospital, Isfahan University of Medical Sciences, Soffeh Street, Isfahan, Iran.
E-mail: a_sarrami@edc.mui.ac.ir

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