Predictors of clinical outcome and radiologic progression in patients with neuropsychiatric manifestations of systemic lupus erythematosus.

Karassa FB, Ioannidis JP, Boki KA, Touloumi G, Argyropoulou MI, Strigaris KA, Moutsopoulos HM.

Source
Department of Pathophysiology, School of Medicine, University of Athens, Athens, Greece.

Abstract
PURPOSE: We sought to identify the predictors of clinical outcome and of the evolution of cerebral abnormalities in patients with neuropsychiatric systemic lupus erythematosus (SLE).

SUBJECTS AND METHODS: Thirty-two patients with SLE (including 14 with the antiphospholipid syndrome) who had been hospitalized with primary neuropsychiatric disease were observed prospectively for at least 2 years. Laboratory and clinical characteristics and data from magnetic resonance imaging (MRI) studies obtained during the hospitalization and 2 years later were evaluated. We ascertained nonreversible or new MRI changes and clinical outcomes, including neuropsychiatric events, during follow-up.

RESULTS: Cranial MRI scans on admission were abnormal in 26 (81%) of the 32 patients. Patients with the antiphospholipid syndrome were more likely to have focal cerebral white matter lesions (odds ratio [OR] = 12, 95% confidence interval [CI]: 2.0 to 72). After 2 years, neuropsychiatric deficits substantially improved in 22 (69%) of the patients, stabilized in 6 (19%), and deteriorated in 4 (12%). The number of prior neuropsychiatric events was associated with persistent MRI lesions (OR = 4.8 per each event, 95% CI: 1.1 to 21) and unfavorable clinical outcome (OR = 4.3 per each event, 95% CI: 1.4 to 13) at 2 years. The antiphospholipid syndrome also predicted an unfavorable clinical outcome at 2 years (OR = 11, 95% CI: 1.7 to 65).

CONCLUSIONS: Among patients with SLE who have neuropsychiatric disease, prior neuropsychiatric events and the antiphospholipid syndrome increase the risk of adverse outcomes.