

Subclinical atherosclerosis in systemic lupus erythematosus patients with secondary antiphospholipid syndrome

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Abstract

AIM: Carotid intima-media thickness (cIMT) has been established as a distinguished marker of cardiovascular risk. The aim of this study was to evaluate an impact of antiphospholipid antibody (aPL) profile (single or multiple aPL positivity) on cIMT values in SLE patients with secondary APS (SAPS).

METHOD: Our study included 100 SLE patients with SAPS (49.4±13.1years), 93 female (93.5%) and 7 males (7.0%). All patients underwent an assessment of cIMT of right and left common carotid artery (CCA), their bifurcation (CCAbiff) and left and right internal carotid artery (ICA) by Doppler ultrasonography. In all patients presence of lupus anticoagulans(LA), anticardiolipin(aCL IgG/IgM) and anti-β2 glycoprotein-I(a-β2GPI IgG/IgM) antibodies has been established, and they were classified into groups with only one or more than one aPL present in any combination.

RESULTS: There were 65.0% patients with more than one aPL present. Average values of cIMT were significantly higher in patients with more than one aPL present for almost all segments of carotid trunk(CCA right, p=0.009, CCA left, p=0.034, CCAbiff right, p=0.093, CCAbiff left, p=0.632, ICA right, p=0.027, ICA left, p=0.544). After adjustment for age, hypertension, diabetes mellitus, hyperlipidaemia, total cholesterol and SLE duration, the relative odds for atherosclerotic plaque presence on carotid arteries in SAPS patients and more than one aPL present was 3.79(p=0.029).

CONCLUSION Multiple aPL positivity in SLE patients with SAPS is an independent predictor of premature atherosclerosis. In this subgroup of SAPS patients more aggressive approach towards prevention and control of standard atherosclerotic risk factors is crucial.

Keywords: systemic lupus erythematosus, antiphospholipid syndrome, antiphospholipid antibody category, carotid intima-media thickness

Recent Publications

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Biography

Ljudmila Stojanovich received her Ph.D. in Medicine in 1999. She is the scientific director in the Bezhanijka Kosa, University Medical Center of Belgrade University. She is an author of three monographs and of about 250 articles on various aspects of Autoimmune Rheumatic disorders. She is in Editorial Boards (LUPUS /LONDON). She is a member of number International Project, and member of the Steering Committee of the "EULAR recommendations for the prevention and management of adult antiphospholipid syndrome". Professor Stojanovich is EULAR Honorary Member, and the President of "12th meeting of the European Forum on APS", in Belgrade, Serbia in April 2020.

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