



CHARACTERISTICS OF DISORDERS OF VASCULAR SYSTEM IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS

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The purpose of the study - to determine the frequency and nature of the evidence of atherosclerotic lesions of the extracranial and peripheral arteries in patients with systemic lupus erythematosus (SLE).

MATERIALS AND METHODS: were examined 34 patients with SLE who were treated at SCAL of the 1st clinic TMA. The diagnosis of SLE was calculated from the diagnostic criteria of the American Rheumatology Association (1982). Inclusion criteria: I and II degree of activity of SLE, duration of admission GC at least 1 year. Exclusion criteria were the III degree of activity of SLE, chronic renal failure stage II-IV. The age of patients ranged from 20 to 60 years, mean age $40,2 \pm 12,8$ years. Among the patients studied was 33 (97%) women and 1 (3%) men.

I was the degree of activity of SLE in 15 (44.1%) and II - in 19 (55.9%) patients. The disease duration ranged from 14 to 496 months, on average - from 14 to 496 months. Duration of GC therapy - from 12 to 27 years, on average - $8,41 \pm 6,8$ years. The daily dose of prednisolone HA during the survey ranged from 1.5 to 40 mg / day and averaged $15,5 \pm 6,18$ mg. In a clinical and instrumental study identified heart disease: myocardial cardiosclerosis or myocarditis, or heart disease - in 30 (88.2%) patients, joint involvement: arthralgia, arthritis, secondary osteoarthritis, aseptic necrosis of the bone - in 30 (82.3%), skin lesions in a "butterfly", dermatitis, alopecia, discoid lupus - in 27 (79.4%), lymphadenopathy - in 24 (70.5%) lesions of serous membranes: pericarditis, pleurisy - in 21 (61.7%), lung injury: pneumonitis, pulmonary fibrosis - in 19 (55.9%), lesions of the mucous membrane: enanthema, thrush - in 16 (47%), vascular damage, manifested by Raynaud's syndrome, livedo, Digital Vasculitis, trophic ulcers, hemorrhagic vasculitis, thrombophlebitis - in 14 (41.2%), kidney disease: lupus nephritis - in 12 (35.3%), nervous system problems: cerebral vasculitis, polyneuritis, stroke - in 10 (29.4%), loss of endocrine organs: thyroiditis, diabetes - in 8 (23.5%). In order to determine the presence of coronary atherosclerosis over patients, in addition to regular clinical examination and ECG in 12 standard leads performed Doppler

echocardiography. To detect atherosclerotic lesions of the extracranial and peripheral arteries using ultrasound duplex scanning of the vertebral artery (PA), internal carotid (ICA) and common carotid artery (CCA), lower limb arteries - common iliac (OPA), the common femoral (CFA), superficial femoral (PBA), the deep femoral (GBA), popliteal (PKA), the back and the anterior tibial artery.

The presence of extracranial atherosclerosis and peripheral vessels was determined by a thickening of the intima-media, plaques in the intima of the arteries, the presence of stenosis.

RESULTS AND DISCUSSION: atherosclerotic vascular disease was detected in 14 (41.1%) patients, has made - 1st group. Plaques in the extracranial vessels were observed in 9 patients, accounting for 26.5% of all patients and 64.2% - Group 1. Atherosclerotic plaques were detected only in the OCA in 2 (22.2%), only in the ICA - in 4 (44.4%), the combined loss of the OCA and ICA - in 3 (33.3%) patients. Stenosis of the carotid arteries was found in 6 patients, accounting for 66.6% of the number of plaques in patients with extracranial vessels, 54.5% - one of the first group and 17.6% of the total number of patients, the degree of stenosis ranged from 10 to 30%. Stenotic changes in OSA was found in 1 patient, which was 16.7% of patients with stenoses in the extracranial vessels, stenosis was 10%. Stenosis of the internal carotid artery was found in 5 patients, representing 83.3% of patients with stenoses in the extracranial vessels, stenosis of 15 to 35%.

Atherosclerotic plaques in the blood vessels of the lower extremities were found in 11 patients, accounting for 32.3% of all patients and 78.6% - Group 1. Plaques observed in OPA in 3 (27.3%) patients, both - in 8 (72.3%), the PAP - in 5 (45.4%), GAB - in 5 (45.4%), RCA - in 6 (54.5%), ZBBA - in 6 (54.5%), PBBA - in 6

(54.5%). Stenosis of the arteries of the lower limbs was found in 6 patients, accounting for 54.5% of the patients with plaque in the blood vessels of the lower extremities, 42.8% - one of the first group and 17.6% - the total number of patients. Stenosis in the OPA identified in 3 (27.3%) patients, both - in 5 (45.4%), in the GAB - in 3 (27.3%), in ZBBA - in 2 (18.2%). Stenosis was in OPA 10 to 60%, in both - from 10 to 50%, in GAB - from 20 to 30%, ZBBA - from 50% to total occlusion. None of the patients reported clinical claudication.

Thus in patients with SLE often detect signs of atherosclerotic arterial disease of the lower extremities (32.3% for $n = 34$), somewhat less - extracranial arteries (26.5% for $n = 34$). Signs of only one of the two pools were investigated vascular 7 patients (20.5% of the total number of the patients with SLE and 50% - with signs of atherosclerosis), only extracranial arteries - in 3 (21.4%), only the lower limb arteries - 4 patients (28.6%) patients. Combined vascular lesion two pools were detected in 3 patients (8.9% of the total number of the patients with SLE and 21.4% - with signs of atherosclerosis). Most frequently (2 patients) reported a combination of extracranial lesions and peripheral arteries, According to the literature artery atherosclerotic changes are common SLE patients. Our data are consistent with the studies by different authors, which indicate that the frequency of detection of carotid plaque in SLE patients is 17-41% (Roman M.J. et al., 2001, Doria A. et al., 2003, Selzer F. et al. 2003, Roman MJ et al., 2003), and atherosclerotic femoral artery - in 6-54% of patients (Gordon C., 2002; Asanuma Yu., 2003; Manger K. et al., 2003).

The literature suggests that the incidence of myocardial infarction in a population of patients with SLE is 5 times higher than in the general, and among women aged under 50 years - 50 times higher (Manzi S. et al., 1997). In 4951 the U.S. was 1998g.v hospitalized SLE patients aged younger than 50 years, the cause of which was atherosclerosis, representing 8.9% of all hospital admissions of SLE patients younger than 50 years (Thorburn CM, Ward M.M., 2003). Thus, for the timely and adequate treatment of SLE patients in need of an appropriate survey to detect atherosclerosis.

CONCLUSIONS

1. In 41.1% of SLE patients without significant renal failure at the age of 20 to 60 years (mean age 40.2 ± 12.8 years) reveal signs of atherosclerotic peripheral and extracranial arteries according to instrumental imaging plaques.
2. SLE patients with evidence of atherosclerotic various vascular beds more often (78.6% of patients with atherosclerotic vascular changes) noted with peripheral artery narrowing of 10% to total occlusion, and somewhat less frequently (64.2% of patients with atherosclerotic vascular changes) - Atherosclerosis of the extracranial arteries with narrowing of 10 to 35%.

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