VASCULAR DAMAGE IN PATIENTS WITH DIABETES MELLITUS AND SMOKING

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Background. Atherosclerosis is a progressive systemic disease associated with fatal cardiovascular (CV) complications. Diabetes mellitus (DM) and smoking are two major CV risk factors contributing to the onset of atherosclerotic disease. This study aims to identify which vascular territories are affected earlier.
Objective(s). To compare the degree of carotid versus peripheral vascular damage in patients with DM and smoking history, in order to determine which vascular region is affected first.
Materials and methods. The study included: Group I with DM (n=30) and Group II - smokers (n=30), aged 45-65 years (60% men, 40% women). The mean duration of DM was 9.4. The smoking index was 18. Diagnostic methods: Doppler ultrasound of the carotid, femoral and tibial arteries, assessment of intima-media thickness (IMT), degree of stenosis and presence of calcifications.
Results. In Group I, vascular lesions were predominantly found in the lower limb arteries: 23% had intima-media thickness > 1.0 mm without stenosis, 40% had moderate stenosis (50-69%) and 37% had significant stenosis (>70%), with calcifications observed in 57% of patients. Significant carotid stenoses were detected in only 23% of the diabetes mellitus group. In Group II, carotid arteries were more frequently affected: 17% had intima-media thickness > 1.0 mm, 60% had moderate stenosis and 23% had significant stenosis, with calcifications present in 42% of cases. Significant lower limb stenoses were observed in 28% of smokers.
Conclusion(s). In patients with diabetes mellitus, lower limb arteries tend to be affected earlier and more severely, whereas in smokers, the carotid arteries are more commonly involved. These distinctions may inform screening strategies and optimize the management of cardiovascular complications.
Keywords: diabetes mellitus, smoking, vascular damage, stenosis.

INFECTIVE ENDOCARDITIS WITH NEUROLOGICAL COMPLICATIONS. CLINICAL CASE

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Introduction. Infective endocarditis (IE) is a serious infectious disease, with polyorganic complications, which causes a high risk of death (20-25%). In 20-40% of cases, IE is complicated by neurological disorders as: stroke, mycotic aneurysms, meningitis, cranial nerve paresis and cerebral hemorrhages.
Aim of the study. Presentation of the patient's clinical case with infective endocarditis complicated by ischemic stroke. The importance of complex treatment in patients with IE with neurological involvement.
Materials and methods. 59-year-old male, with IE caused by beta-hemolytic streptococcus with mitral valve (VM) involvement, hospitalized in the Institute of Cardiology in severe condition. From the anamnesis: onset with a stroke. Clinically and paraclinically examined by: blood cultures, ECOCG, clinical and biochemical analyses, consulted by a neurologist.

Results. Fever 39°C, chills, motor aphasia, paresis on the right side. Objective(s).: pale skin, petechiae, Janeway lesions. Rhythmic heart murmurs, HR 90 b/min, systolic murmur at the apex and diastolic at the aorta, BP 90/50 mmHg. Paraclinically: BC beta-hemolytic streptococcus. ECOCG: mobile vegetations on MV 10 mm and AoV 12 mm; regurgitation on MV, VAo and VTs of grade III, EF 56%; Radiologically – bilateral septic pneumonia; Hb 89 g/l, erythrocytes $2.8x10^{12}$, leukocytes $11x10^{9}$, ESR 66 mm/h; ASLO-1:400; FR 48 U/l. Treatment with 2 antimicrobial regimens in maximum doses, antifungals, diuretics, fractionated direct anticoagulants, nootropic medication.
Conclusion(s). Infective endocarditis can often occur with polyorganic embolic complications, more frequently with stroke and pulmonary thromboembolism, which negatively influence the evolution and prognosis of the disease, causing disability. The treatment of these patients is complex and individualized.
Keywords: stroke, infective endocarditis, individualized therapy.

INFECTIVE ENDOCARDITIS WITH EMBOLIC SYNDROME. CLINICAL CASE

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Introduction. Infective endocarditis (IE) presents with systemic embolic complications in 10-57% of cases: cerebral (26.3%), splenic (6.8%), and pulmonary (6.1-32%), leading to a malignant course with disabilities (172,359 cases/year). Early diagnosis and targeted treatment facilitate a favorable prognosis.
Objective(s). Description of the clinical case of a patient with infectious endocarditis and emboli in three organs. Importance of early diagnosis and personalized treatment in the management of IE.
Materials and methods. Female, 63 years old, with streptococcal infective endocarditis, involving the aortic valve (AV), with systemic and pulmonary emboli, admitted to the cardiology department of the CMH "Holy Trinity". Onset with fever, sweating, severe abdominal pain. Clinically and paraclinically investigated through echocardiography, blood cultures, biomarkers.
Results. Fever of 40.6°C, chills, dyspnea, palpitations. Physical examination: pale skin, Osler nodes. Heart rate 120 bpm, diastolic murmur at the aortic area, blood pressure 130/90 mmHg. Investigations: blood cultures (3 sets) *Streptococcus β-haemolyticus*. ECHO: 20 mm vegetations on the aortic valve, grade II aortic regurgitation, ejection fraction 55%. ESR 50 mm/h; rheumatoid factor negative; CRP 96 U/L; D-dimers 500 ng/mL. Abdominal ultrasound: splenic and renal emboli. Chest X-ray: small-branch pulmonary embolism (PE). Treatment included antimicrobial, antifungal, anticoagulant agents, and β-blockers, with an unfavorable prognosis.
Conclusion(s). Infective endocarditis, when diagnosed late, is complicated by severe valvular regurgitation and large vegetations, the fragmentation of which leads to multiple embolic syndrome, worsening the disease progression, hindering timely treatment, and often progressing toward an unfavorable outcome.
Keywords: infective endocarditis, embolic syndrome, large vegetations.