Abstract: **P681**

Tromboembolic complications in patients with LVNC

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Background: Left ventricular noncompaction cardiomyopathy (LVNC) is a rare, heterogeneous disease, which is based on a two-layer structure of the myocardium. The main causes of disability in patients are thromboembolism, progressive heart failure and arrhythmias.

Purpose: determination of the frequency and risk factors of thrombosis and thromboembolic complications in patients with LVNC.

Methods: Retrospective analysis of medical records and complex instrumental examination data (ECG, echocardiography, 24-hours Holter monitoring of ECG, heart MRI) of 54 patients (mean age 39 years (25-75 percentile: 30-52 years), men/women 23/31) with LVNC(echocardiography criteria Chin, Jenni, Stollberger, MRI criteria Petersen).

Results: It was found that 22 patients (41% of the total group of patients) had LV thrombosis and/or thromboembolic complications in history. Of these, 23% (n=5) at the time of the study had only thrombosis of the left ventricle. At the same time, 14% (n=3) had the appearance of new LV thrombosis. Embolism in the main arteries was observed in 59% (n=13) of cases, including embolic myocardial infarction was diagnosed in 18% (n=4) of patients. In 59% (n=13) had TIA/stroke. In 14% (n=3) of cases there was an embolism in a small circle. Embolic events in 18% (n=4) of cases occurred during anticoagulant therapy (enoxaparin sodium), in two patients with acetylsalicylic acid 100 mg / day, in 68% of cases (n=15) patients did not receive antithrombotic therapy. When comparing the group of patients with thrombosis and/or thromboembolic complications and the group of patients without the above complications (n=32). Were found that these groups of patients significantly differ in such parameters as: sex (in the first group 73% (=16) are men compared to 23% (=7) in the group without thromboembolism, $p<0.05$); the presence of myocarditis (27%, n=6 compared to 6%, n=2, p=0.046); the presence of atrial fibrillation (55%,n=12, compared to 13%, n=4, p=0.002); left ventricular systolic dysfunction (LV FV in the first group: median - 24% (25-75 percentile: 14-35%, compared with 46% (41-57% -25-75 percentiles) in the group without embolism, $p<0.05$). There were no statistically significant differences between the groups by such parameters as age and hypertension ($p>0.05$).

Conclusions: LVNC is associated with a high risk of left ventricular thrombosis and thromboembolic complications. Possible risk factors are atrial fibrillation, left ventricular systolic dysfunction, male sex, the presence of myocarditis.