The discovery of a massive thrombus through echocardiography obliges the clinicians to strategies for secondary prevention of trombembolic events. The main line of actions of stroke prevention in cardioembolism is mostly connected with antithrombotic drugs, but also other, more invasive. Certainly, surgery is the best solution for a successful prognostic.

**Case report.** We present a case of a non-anticoagulated 56-year-old woman with severe MS. She was admitte to cardiology department with dyspnea, palpitations and fatigue. Anamnesis: 10 years of atrial fibrillation (AF) and 7 years with arterial hypertension. Physical examination revealed an irregular pulse, at a rate of 76 beats/min. The ECG revealed an atrial fibrillation with a rate 75-100 b/min. ECHOCG - revealed a severe MS (V max 2.9 m/s, GP max – 33.8 mm/hg, area – 0.5 cm2) with third degree mitral regurgitation and LA thrombus (90\*80 mm), fixed to the upper and rear wall of the LA, third-degree tricuspid regurgitation. Left atrium was enlarged (59 mm), severe pulmonary arterial hypertension. The preoperative coronarography showed the absence of any sign of atherosclerosis. The patient was referre to cardiac surgery for correction of valvular pathology. Cardio-surgical intervention was performe: mechanical MV prosthesis ST – JUDE MED 27, DEVEGA-CABROL tricuspid annuloplasty, removing the massive encapsulated thrombus (90\*80 mm) from the LA with the origin into the left appendage, obliterating the pulmonary veins, then - surgical closure of the left atrial appendage. After surgery, the patient had recovered well without any neurologic dysfunction in the postoperative period.

**Conclusions.** The risk of cardioembolic complication to the patient with severe mitral valve stenosis is very high and depends on age and the presence of other comorbidities. Anticoagulant treatment in patients with severe MS and AF is paramount, cessation of anticoagulant treatment leads to serious complications such as stroke. In our case, the size and organized nature of the thrombus, prevented embolization into the systemic circulation, but in other cases the risk is very high. In the era of open-heart surgery and of mitral valve replacement, the prognosis for most patients with valvulopathies, especially those with rheumatic etiology is excellent. **Key words:** mitral stenosis, thrombus, anticoagulation, surgery

## 224. CLINICAL AND INTERVENTIONAL KEY POINTS IN PATIENTS WITH MYOCARDIAL BRIDGES

## Author: Mihail Tasnic

Scientific advisers: Catereniuc Ilia, MD, PhD, University Professor, Department of Human Anatomy, Revenco Valeriu MD, PhD, University Professor, Department of Internal Medicine, Cardiology, *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

**Introduction.** Myocardial bridges, parts of cardiac tissue that cover some parts of underepycardial coronary artery. It is important to study their morphological and clinical aspects, because of their possible implication in the genesis of the coronary hemodynamic changes.

**Aim of the study.** To determine the incidence of myocardial bridges detected by coronary angiography, their clinical features and management peculiarities.

**Materials and methods.** We have retrospectively analyzed 6168 cases of diagnostic angiography and coronary angioplasty between 2013-2019. Myocardial bridges were detected in 357 cases (4,9%). For the study of the clinical aspects of patients with myocardial bridges, only cases of angiography with myocardial bridges and coronary arteries with mild or without

atherosclerotic lesions were selected – 226 cases. The complications and difficulties of the interventional procedures in the presence of myocardial bridges and severe coronary atherosclerotic lesions have been studied in a group of 131 patients.

Results. Preferential localization of the myocardial bridges (97% of cases) was on the anterior interventricular artery, 1,81% - on the diagonal branch, in 0,9% of cases – on posterolateral and marginal branches, 0,6% - on the right coronary artery, and 0.3% along the circumflex artery. In the detected cases, the degree of arterial systolic stenosis exceeded 75% were described in 16% of cases, 50-75% in 36% and in 46% of cases the stenosis was below 50%. In 48% of cases the stress test was considered as typical positive in patients with myocardial bridges with documented myocardial ischemic change on ECG and without severe coronary atherosclerotic stenosis. There was no interdependence between the degree of stenosis caused by the bridge and the degree of ST-segment depression in the effort test. In the conducted study, only in 3 cases, the reason for hospitalization for diagnostic coronary angiography was acute coronary syndrome in the arterial territory covered by a myocardial bridge. In 9 cases, due to myocardial ischemia caused by the myocardial bridge, revascularization by aortocoronary bypass was recommended. In 6 cases the arterial portions under the bridge were stented with mechanical compression and deformation of the installed stent after 3 months in 3 cases. Within the group of patients with severe atherosclerotic coronary lesions and myocardial bridges who need PCI, in 6 cases, due to coronary deformation at the entrance under the bridge, the stent crossing was difficult in the respective segment. In 14 cases, the presence of the bridge and the entrance of the distal end of the stent under the myocardial bridge when stenting the proximal to bridge atherosclerotic lesions, induced prolonged coronary spasm or coronary dissection.

**Conclusions.** Although no correlation between the degree of compression caused by the bridge and the degree of myocardial ischemia has been established, myocardial bridges could cause myocardial ischemia by possibly an addition to the mechanical action on the artery under the bridge of the coronary spasm, determining thereby acute coronary syndromes. The treatment of patients with significant myocardial bridges with recurrent ischemia on optimal drug therapy would preferably be by coronary bypass due to the mechanical action of the myocardial bridge on the coronary stents. Coronary stenting with penetration of the stent distal end under the myocardial bridge may be associated with coronary dissection, coronary spam and/or mechanical deformation of the stent.

## 225. AN UNUSUAL CASE OF CONGENITAL TRICUSPID VALVE ANOMALY

## Author: Inessa Cojuhari

Scientific adviser: Irina Cabac-Pogorevici, PhD, University Assistant, Department of Internal Medicine, Cardiology, *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

**Background.** A 38 years old man is presented with acute onset with dyspnoea for 2 months. From anamnesis is known that he suffered 10 years ago a car accident complicated with multiple fracture. Patients is unknown with cardiac pathology and he does not use any medication.

**Case report.** Upon arrival at the emergency department, his vital signs were: blood pressure 120/80 mmHg, heart beat 70 beats/min, body temperature 36.7 C and O2 saturation 98 %. Electrocardiography (ECG) registered right bundle branch block. Initial laboratory data didn't