Paraclinical investigations: ECG: Sinus rhythm, HR=75/minute, EHA – intermediate, pathologic Q wave in III, signs of LV hypertrophy, repolarization disturbances. Echo-CG: Induration of ascending aortic walls, aortic and mitral valves, EF=64%, contraction function of the LV is sufficient. General and biochemical blood analysis: within normal ranges. Markers of myocardial necrosis: negative.

Treatment: Beta-blockers, nitrates, antiplatelets, ACE inhibitors, anticoagulants, metabolic drugs and diuretics.

Clinical diagnosis: Ischemic heart disease. Unstable angina pectoris. State after PCI revascularization (09.03.14). Congestive heart failure II (NYHA).

Conclusion: The patient L., 50 years old, develops an early postinfarction angina pectoris after being submitted to PCI revascularization with thrombus aspiration, as a result of a myocardial infarction experienced 2 weeks ago. The antiischemic treatment received during hospitalization had a positive effect, leading to symptoms' resolution and the patient is recommended a future stent implantation.

Keywords: Unstable angina, PCI

65. CONTEMPORARY ASPECTS OF INTRAVASCULAR ULTRASOUND IN EVERYDAY PRACTICE

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Introduction: IVUS utility is to quantify the severity of atherosclerotic stenoses that appear angiographically moderate and often significantly reduce the minimum luminal surface. Detailed images of the arteries can be visualized using IVUS catheter that provides cross sections, bidimensional concentric stacked vessels. This catheter possesses rotational transducers able to visualize the vascular wall layers in three positions: longitudinal, rotational and ultrasonographical. In literature, the information about IVUS investigation is modest. The smaller is the distance to the catheter, the better is image clarity. We performed the literature synthesis on IVUS investigation to highlight its priorities in comparison with angiography.

Purpose and Objectives: Taking into account the incontestable medical progresses of the last decades, that had repercussions over the investigations applied in medical practice, there exists a necessity of referring to the recent practical methods, in consequence, a true paradigm shift and replacement of the old methods with modern practice are expected.

Materials and methods: Contemporary bibliographic and scientific data were selected and the recent recommendations on the problem of diagnosing the severity of atherosclerotic vascular stenoses, rarely diagnosed angiographically (~50%) were revised, the morphology and atherosclerotic plaque diameter were studied, parietal calcifications were assessed by intravascular ultrasonography with the electronic study of these complications.

Results: The analysis of literary domain sources reveals that the IVUS method is used mainly in the USA, is currently in a slow phase of growth, with an average of 5-8% of the coronary interventions performed. IVUS utilization in Europe is lower, in Japan it reaches 14-20%, reflecting the reimbursement rates and medical practice patterns. The increasing application of this technique is due to the practical simplicity of use, image quality and precise information about the structure of the vessel.

Conclusion: Identification of unstable plaques in medical practice is one of the main challenges of modern cardiology, because of the prevalence of atherothrombotic phenomena and its consequences on cardiovascular mortality and morbidity. IVUS is a method that quantifies the severity of atherosclerotic stenoses and provides important details of all vascular layers. The detection of unstable plaques by IVUS has a major value, particularly in patients with acute coronary syndrome for the prevention of subsequent atherothrombotic events and administration of the appropriate treatment.

Keywords: IVUS, atherosclerosis, stenosis