

on mortality, it would be very useful to find which parameters of MS and which combinations of parameters were independently associated with RV changes in both genders.

Purpose and Objectives: Highlighting the importance of the evaluation of right ventricle function in patients with metabolic syndrome for the assessment of prognostic and possible early intervention.

Material and Methods: The analysis of available literature about the methods of the assessment of right ventricle function and its particular importance in patients with metabolic syndrome.

Results: For decades, the RV was considered as the “unstressed” ventricle, unnecessary for the complex cardiac function. At the beginning, authors were interested only in congenital heart diseases and pulmonary hypertension, which severely impacted the RV. However, gradually the attention of researchers focused on other pathological conditions as hypertension, diabetes and obesity or their combinations. Subjects with the MS have a significantly changed right ventricular structure and function. Women and men with MS have different predictors of RV hypertrophy and diastolic dysfunction, considering individual MS criteria or their combinations. Abdominal obesity and increased glucose level are independent predictors of RV hypertrophy and diastolic dysfunction exclusively in women with MS. In addition, among women with MS, triad of MS risk factors such as increased BP, hyperglycemia, and dyslipidemia, is an independent predictor of RV hypertrophy; whereas the other triad (increased glucose level, abdominal obesity, and dyslipidemia) is a predictor of RV diastolic dysfunction. Treatment of hypertension and diabetes not only improves the structure and function of the left ventricle as generally thought but of the RV as well.

Conclusion: MS has an important role in damage of RV structure and function. Despite preserved left ventricular systolic function, both systolic and diastolic functions of the RV deteriorate in MS patients. Among MS criteria systolic blood pressure, waist circumference and glucose level are independently associated with RV structure and function. Different parameters of MS are responsible for RV remodeling in women and men. The metabolic parameters of MS are more important for RV remodeling in women.

Keywords: Metabolic syndrome, right ventricle, diastolic dysfunction

57. THE ROLE OF DOBUTAMINE STRESS ECHOCARDIOGRAPHY IN THE ASSESSMENT OF MYOCARDIAL VIABILITY IN PATIENTS WITH ISCHEMIC LEFT VENTRICULAR DYSFUNCTION

Sedaia Ecaterina, Taşnic Mihai

Academic adviser: **Revenco Valeriu**, M.D., Ph.D., Professor, Chief of Cardiology Department, State Medical and Pharmaceutical University “Nicolae Testemiţanu”, Chişinău, Republic of Moldova

Introduction: Stress (exercise or pharmacologic) two-dimension transthoracic echocardiography can be used to demonstrate the presence of coronary disease, to assess myocardial viability prior to revascularization, to identify “culprit” lesion, etc. Impaired left ventricular (LV) systolic function in patients with coronary heart disease is often a partially reversible process and it may improve markedly, and even normalize, in subsets of patients following successful revascularization. The myocardium that recovers function after revascularization has been called “hibernating”. To the extent that improvement in regional or global LV systolic function is a significant goal in such patients, the ability to accurately assess regional myocardial viability in a dysfunctional territory prior to revascularization becomes an important component of the decision making process.

Purpose and Objectives: The role of Dobutamine stress echocardiography (DSE) in the evaluation of myocardial viability in the setting of hibernation will be reviewed here.

Material and Methods: The analysis of the available literature about the importance and clinical application of Dobutamine stress echocardiography in the assessment of myocardial viability.

Results: DSE is an important noninvasive clinical tool for the detection of hibernating myocardium. It examines the “inotropic reserve” of dysfunctional but viable myocardium. A contractile response to Dobutamine appears to require that at least 50 percent of the myocytes in a given segment are viable; the contractile response also correlates inversely with the extent of interstitial fibrosis on myocardial biopsy. The predictive value of Dobutamine stress echocardiography

graphy appears to be greatest when there is a biphasic response: improvement at low dose and worsening at high-dose Dobutamine. The initial improvement in wall motion reflects recruitment of contractile reserve during low-dose Dobutamine, and hence reflects viability. In comparison, higher doses lead to subendocardial ischemia and worsening of the wall motion abnormality, identifying stress-induced ischemia. Thus, testing at various doses appears to be important for the optimal assessment of myocardial hibernation by this technique. Patients with left ventricular dysfunction who demonstrate myocardial viability with Dobutamine stress echocardiography have a better survival with revascularization than with medical therapy.

Conclusion: The available data strongly suggests that DSE studies help differentiate viable from nonviable myocardium, and identify patients with ischemic LV dysfunction that will most likely benefit from coronary revascularization.

Keywords: Stress echocardiography, myocardial viability, hibernating myocardium

58. STUDY OF CONTEMPORARY LITERATURE ON THE TOPIC OF "CONGENITAL CLUBFOOT IN CHILDREN"

Soleh Lana

Academic adviser: **Gudumac Eva**, M.D., Ph.D., Professor, Academician, IP "Nicolae Testemitanu" State Medical and Pharmaceutical University, Chisinau, Republic of Moldova

Background: Clubfoot (TEV) is a congenital disorder, involve bone deformity and malposition in form of a curled shape or twisted position of the ankle, heel and toe with soft tissue contraction, that if left untreated can limit a person's mobility by making it difficult and painful to walk although inexpensive and reliable treatment exist, especially with the ponseti method.

Material of study: Congenital clubfoot (CTEV) is including several form of deformity: Talipes varus, Talipes valgus, Talipes equines, Talipes calcaneus, Talipes cavus. Easily identify in a new born which present with abnormal shape and rigid foot, leg torsion and tightening of Achilles tendon. Therefore immediately apply treatment with gentle manipulation follow by serial of casting, ending with splintage. Failure of conservative treatment and late presentation after 5 month of age are indications for surgery.

Results: Affected foot is usually smaller and shorter. Approximately appear in 1 case per 1000 live birth, male-to-female ratio is 2:1, bilateral involvement in 30%-50% of cases, there 10% chance of subsequent child being affected if parents already have a child with a clubfoot.

Conclusion: Clubfoot is the most common congenital anomaly of the foot found in children, frequency ranks second after locomotors pathology. It affects mainly males, as can be unilateral and bilateral. Outcome following management is subjectively good for the majority of patients.

Keywords: congenital clubfoot, anomaly, deformity

59. CHRONIC HEART FAILURE IN HYPERTENSIVE PATIENTS

Stavita Tatiana

Academic adviser: **Vetrila Snejana**, M.D., Ph.D., Assistant Professor, State Medical and Pharmaceutical University "Nicolae Testemitanu", Chisinau, Republic of Moldova

Introduction: Hypertension remains a major public health problem associated with considerable morbidity and mortality. Hypertensive heart disease is a constellation of abnormalities that includes left ventricular hypertrophy (LVH), systolic and diastolic dysfunction and their clinical manifestations including arrhythmias and symptomatic heart failure (HF). Presently, diastolic heart failure accounts for about 50% of the heart failure population.

Purpose and objectives: To determine the clinical and laboratory characteristics of heart failure in patients with hypertension.

Methods: It was a prospective study of 23 patients admitted in Institute of Cardiology