

51). The KOOS results showed that the QoL - 35.7% qualified as low. OA affected family or close relationships in 66%. The level of activity in daily living was 44.0% lower than the level of pain with 57.1% or other symptoms - 64.9%. The average cost excluding joint replacement was \$685, the direct costs 71.04% from them (mean \$485) per person per year and indirect costs - 29% (\$190). The direct costs are comparable to those reported in Western countries; however, the insurance covers just 50.7% from direct costs.

**Conclusion:** Patients with knee osteoarthritis have impaired QoL as well as substantial socio-economic burden attributable to disease. The economic impact of OA is largely placed on the patients, they having relatively high out-of-pocket expenditures.

**Keywords:** Knee osteoarthritis, QoL, burden of disease

## 55. STUDY OF CONTEMPORARY LITERATURE ON THE TOPIC OF "PEDIATRIC ABDOMINAL TUMORS"

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**Background:** Abdominal cancers are seen very infrequently in patients younger than 15 years, and most of the evidence is derived from case series. As the treatment for childhood cancer has improved dramatically over the past three decades, most children diagnosed with cancer today survive this illness.

**Material of study:** Abdominal cancers include adrenocortical tumors, carcinomas of the stomach, cancer of the pancreas, colorectal carcinomas, carcinoid tumors, and gastrointestinal stromal tumors. Tumors in the abdomen usually don't create many obvious symptoms, especially when they're in the early stages. If the mass grows or spreads, a person may experience swelling and pain, diarrhea, weight loss, nausea, vomiting, bad breath, and digestive problems. A malignancy may also cause fatigue, fever, and blood in the stool. Some types of tumors have more specific symptoms associated with them: for instance, people with liver masses often become jaundiced, and those with ovarian cancer may have painful menstruation or pain during intercourse. Likewise, those with bladder growths may have a hard time urinating, and those with kidney cysts often have high blood pressure.

**Result:** One of the most common abdominal tumors in pediatric is the renal tumor (Wilm's tumor), which is found in 45% of patients with an incidence of 8 cases per million of children under the age 15. And mutations of the WT1 gene on chromosome 11p13 are observed in approximately 20% of Wilm's tumor. One of the real successes of modern medicine survival was on 1930s - 30% but in 2010s - >90%.

**Conclusion:** Advances in molecular genetics research in the past 3 decades have led to an increased understanding of the genetic events in the pathogenesis and progression of human malignancies, including those of childhood. A number of pediatric malignancies serve as models for the molecular analysis for a variety of purposes.

**Keywords:** Abdominal tumors, mutation, Wilm's tumor

## 56. RIGHT VENTRICULAR REMODELING IN METABOLIC SYNDROME

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**Introduction:** The right ventricle (RV) plays an important role in the morbidity and mortality of patients presenting with signs and symptoms of cardiopulmonary disease. However, the systematic assessment of right heart function is not uniformly carried out. The impact of the metabolic syndrome (MS) on the RV was examined in very few studies. Considering the epidemic spreading of MS, its adverse effect on RV remodeling and the unfavorable role of RV hypertrophy

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

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**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 echocardi-