38. PARTICULARITIES OF PULMONARY INVOLVEMENT IN SYSTEMIC LUPUS ERYTHEMATOSUS

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Introduction: Respiratory involvement in systemic lupus erythematosus (SLE) is not as well-known as the cutaneous and renal manifestations. It occurs frequently, but the diagnosis may be difficult because of the heterogeneity of the anatomical and clinical presentations.

The pathophysiology of SLE involves genetic, endocrine, environmental, pharmacological and immunological factors with hyperactivity of B lymphocytes and a cytotoxic reaction of auto-antibodies, activation of complement and circulating immune complex deposition.

Pulmonary manifestations of SLE can involve the pleura, lung parenchyma, airways, pulmonary vasculature and respiratory muscles. Pleuro-pulmonary manifestations are present in almost half of the patients during the disease course and may be the presenting symptoms in 4-5% of patients with SLE.

Purpose and Objectives: To analyze the incidence, clinical features and General Well Being (GWB) in patients with systemic lupus erythematosus (SLE) and pleuro-pulmonary involvement.

Materials and Methods: A descriptive study of 30 SLE patients, aged 44.5 ± 12.6, was recruited from Cardiology Institute between 2013 and 2014. All patients were evaluated clinicaly and laboratory tests were done. To assesse pulmonary involvement, were performed chest X-ray, spirometry, DLCO and High Resolution CT scan of thorax.

Results: Pleuropulmonary manifestations, were diagnosticated in fourteen (46.7%) SLE patients. Among them 10 (71.4%) were symptomatic and had complaints of dyspnoea, cough, pleuritic chest pain and some of them history of hemoptysis. At radiological assessment, pleural effusion was found in 29% of cases, in 7% - lupus pneumonitis, in 7% pulmonary artery hypertension (PAH) and in 7% Shrinking Lung Syndrom (SLS). Interstitial lung disease (ILD) was found in 50% of cases. In 4 (28.6%) asymptomatic patients, chest radiographs and CT scan of thorax showed unilateral or bilateral patchy areas of consolidation, predominantly in the lung bases, which in two cases was associated with pleural effusion or atelectasis. Screening test for lung function, by spirometry, found abnormality in 14 (46.6%) cases and restrictive change was the major abnormality 7 (23.3%). The level of severe stress, in patients with lung involvement, assessed by GWB was – 8 patients (57.14%) versus those without – 6 patients (37.5 %).

Conclusion: Commonest respiratory symptom was dyspnoea 8 patients (57.14%) and commonest respiratory manifestation was interstitial lung disease 50% and pleural effusion 29%. Patients with pulmonary disease have a higher degree of distress than those without.

Keywords: Systemic Lupus Erythematosus, pulmonary involvement, clinical features

39. CHARACTERISTICS OF ARRHYTMIAS IN AORTIC VALVE DISEASE

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Introduction: Aortic valve disease and arrhythmias are two conditions associated with increased cardiovascular morbidity and mortality. Aortic valve disease is often associated with atrial fibrillation the prevalence of which is estimated at 0.4% in general population. A thromboembolic complication in valvular-atrial fibrillation is of 17.5% and in the nonvalvular is about 5% annually.

Purpose and objectives: Estimating the characteristics of arrhythmias in aortic valve disease.

Material and Methods: The study included 56 patients with aortic valve disease, hospitalized

in the Cardiology Department Nb. 4 of the Cardiological Institute, including 35 patients with aortic stenosis (SA) and 21 - with aortic regurgitation (RA). The procedure included the estimation of clinical and paraclinical parameters. For statistical processing of data were applied to the set of programs Microsoft Excel and "t" test - Student.

Results: From the history of patients we found degenerative etiology present in 25 (44.63%) patients, rheumatic - 22 (39.29%), endocarditis - 5 (8.92%), congenital (bicuspid) - 3 (5.35%) and Marfan syndrome in only 1 (1.78%) case. Distribution of patients by performing electrocardiographic route mentioned the presence of arrhythmias in 56 (100%) patients and conduction disorders in 41 (73.21%) cases. The most frequent alteration of rhythm in both study groups was the atrial fibrillation in 18 (51.43%) cases of SA and 5 (23.81%) of RA. Ventricular ectopic beats were ranked second in the group with SA – 11 (31.42%) of patients, whereas in the group with RA joined the rarest – 2 (9.5%). Atrial extrasystoles were noted with a higher preponderance in RA – 5 (23.81%) patients than in SA – 2 (5.71%). Atrial flutter in patients with RA prevailed with 4 (19.04%) of cases, and in those with SA - only 2 (5.71%) of cases.

Conclusion: The study of features of arrhythmias in aortic valve disease has predominantly established the degenerative etiology. It was observed the prevalence of atrial fibrillation, both in patients with aortic stenosis, as well as in those with aortic regurgitation.

Keywords: Arrhythmias, aortic stenosis, aortic regurgitation

40. METABOLIC SYNDROME AND HYPERURICEMIA

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Introduction: Metabolic syndrome comprises several abnormalities that occur together: general or central adiposity, elevated blood pressure, dyslipidemia, and hyperglycemia. In addition, several other abnormalities including those of fibrinolysis, thrombosis, inflammation, and endothelial function are strongly related to the syndrome. Elevated serum uric acid levels are commonly seen in association with glucose intolerance, hypertension, and dyslipidemia. Accumulated evidence have also demonstrated that serum levels of uric acid have a significant correlation with obesity and complications of metabolic syndrome.

Materials and methods: In our study were selected about 200 patients with grade 1and 2 hypertension aged up to 65 years. The diagnosis of metabolic syndrome was established according to the proposed criteria based on WHO recommendations (1998), NCEP / ATP III (2005) and IDF (2005). We evaluated uric acid levels and hyperuricemia in patients with MS.

Results: In researched group was established a significant prevalence (57.7%) of hyperuricemia in patients with metabolic syndrome. It was noted a proportional correlation of hyperuricemia and insulin ressistance with increasing obesity degree. The same tendency was noted to the mean plasma levels of uric acid in patients with metabolic syndrome. In patients with hyperuricemia average values of the atherogenic lipid fractions (TC, TG, LDL-C) were significantly higher than in those with normouricemia and the corresponding values of HDL-C were lower, while the TC and LDL-C levels in patients with hyperuricemia exceeded the normative recommended by NCEP. It was also noted that in the group of persons with hyperuricemia, hypertrigliceridemia met 2.79 times more frequently than in individuals with normal levels of uric acid and the probability of hypertrigliceridemia in the presence of hyperuricemia was almost 3.21 times higher.

Conclusion: Hyperuricemia, considered an index of metabolic disorders, was noted in 57.8% of metabolic syndrome patients and significantly correlated with the values of lipid indices (TG, LDL-cholesterol), basal glucose levels, blood pressure values and indices of obesity (body mass index and waist circumference).

Keywords: Metabolic syndrome, hyperuricemia