as a waist circumference (WC) of 90cm and more in male, and 85cm and more in female, and a triglyceride level of 1.7 mmol/L or more. Patients were categorized into 3 phenotype groups: 1st with hypertriglyceridemia and normal WC, 2nd with normal triglyceride level and increased WC, 3rd with HTGW.

Results: The patients of 3rd group characterized by maximum blood pressure levels. Body mass index (BMI) in 3rd group was also highest (31.05±0.61kg/m²) vs 1st (23.95±0.91kg/m²) and 2nd one (30.21±1.00kg/m²). Fasting insulin levels were elevated in patients of 3rd group with HTGW (14.66±0.95 mkU/ml), and same in 1st (12.52±2.79 mkU/ml) and 2nd (12.31±1.41 mkU/ml) groups.

IL-18 – pro-inflammatory cytokine levels in 3rd group were 176.97±2.38pg/ml, that was statistically higher in comparison with 1st (167.73±7.21pg/ml), and 2nd group (172.40±5.61 pg/ml; p<0.05). Plasma IL-18 in 2nd group was higher in men (172.40±5.61 pg/mg) vs women (169.00±1.11 pg/ml), and 2nd group (172.40±5.61 pg/ml) compared with men (160.83±9.35 pg/ml; p<0.05). The same tendency was found in group 3 with HTGW phenotype presence where IL-18 content in women (180.62±2.93 pg/ml) exceed cytokine level in men (167.76±3.52 pg/ml; p<0.05).

Conclusions: Our results can suggest that HTGW phenotype is associated with more significant in women elevation of pro-inflammatory activity, high glucometabolic risk and atherogenic metabolic risk profile and can be used as a simple and inexpensive marker to help identify patients with high cardiometabolic risk.

The peculiarties of pulse pressure variation and renal function in patients with arterial hypertension

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The purpose of the study was to establish the relationship between the pulse pressure (PP) changes and renal function in patients with arterial hypertension (AH).

Methods: 47 patients with AH of 2nd stage without diabetes and obesity were examined (25 males and 22 females, mean age – 52.5±4.3 years, duration of AH – 8.7±3.5 years; BMI 24.3±3.7 kg/m²). The indexes of lipid blood profile, glycemia, and blood creatinine were assessed, as well as glomerular filtration rate (GFR; ml/min/m²) according to MDRD (Modification of Diet in Renal Disease Study) and standardized for body surface area – 1.73 m²; also ambulatory blood pressure monitoring was performed.

Results: The indexes of daily mean systolic (SBP) and daily mean diastolic (DBP) blood pressure were: 159.4±8.3mm Hg and 96.8±5.4mm Hg respectively. The changing of the circadian rhythm was observed in 94% of patients, of which 73% had “non-dipper” type; 19 % – “night-peaker”, 8% – “dipper”. A direct correlation was established between the level of PP and SBP (τ=0.788; p <0.001); PP and DBP (τ=0.316; p <0.005). The increase of PP depended on the augmentation of SBP to the greater extent than of DBP. A direct correlation between PP and blood creatinine levels was found (τ=0.36; p<0.001), as well as the inverse correlation between PP and GFR (τ=–0.284; p<0.005), which confirms the relationship between increasing levels of PP and decrease of the filtration capacity of the kidneys.

Conclusions: In patients with hypertension the increase of PP depends on the augmentation of SBP to the greater extent than of DBP. The relationship between the increase of PP and decreased functional capacity of the kidneys is confirmed. The management of antihypertensive therapy based on the dynamics of PP may prevent the development and progression of severe renal disease and renal failure.

Pulmonary embolism in Behçet's disease: a series of 10 patients

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Background and objective: Pulmonary embolism is an unusual complication of Behçet's disease (BD). Our aim study is to analyse epidemiological, physiopathological and evolutive aspects of this condition.
Methods and Results: From 1998 to 2013, 10 cases of pulmonary embolism were found amongst BD patients in the department of internal medicine of Hedi Chaker Hospital. All these patients fulfilled International Study Group criteria for BD. 10 patients (6 men, mean aged at 29.9±9.08 years) were diagnosed as having pulmonary embolism. This was inaugural in 7 cases. Peripheral venous thrombosis was present in 50% of patients; cardiac thrombosis was presented in 2 cases and pulmonary aneurysm in 2 patients. Pulmonary infarction has been noted in 3 cases. Pulmonary artery pressure may be elevated, and may indicate a poor prognosis. Mediastinal lymphadenopathy and mild pleural and pericardial effusions was also observed in 1 case. Protein C, protein S, antithrombin III and homocysteine levels were normal in all cases. One patient was positive for IgG antiphospholipid antibody. All our patients were treated successfully by anticoagulation therapy combined with high dose prednisone, colchicine and intravenous cyclophosphamide in 2 patients. After a mean follow-up of 106±49 months, 4 patients had a recurrence of pulmonary embolism and only 1 patient was dead.

Conclusion: Pulmonary embolism is one of the severe and worst prognostic manifestations of the BD. Our knowledge about pulmonary complications of Behcet's disease continues to evolve, but we need controlled trials for the management of the disease. The main goal should be to elucidate the pathogenesis and standardize the management according to the underlying pathologic process.

0299
Interleukins 33 and IL-1β, left ventricular geometry and diastolic dysfunction in hypertensive patients with obesity
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Purpose: To investigate interrelations between interleukin 33 (IL-33) and IL-1β (IL-1β) serum levels, left ventricular (LV) remodeling and diastolic dysfunction (DD) in hypertensive patients with obesity.

Materials and methods: 80 hypertensive patients (51 obese) underwent transthoracic echocardiography. LV geometric pattern by A.Ganau, E/A and E/E’ ratios, pulmonary wedge pressure (PWP) by S.Nagueh were calculated.

Results: IL-33 and IL-1β serum levels were estimated using ELISA.

Conclusions: Significant increase in IL-33 and IL-1β levels in hypertensive patients independently of BMI, and formed 4 clusters (see pic.) Cluster 1 was associated with the highest LV myocardial mass index (MMI) (160.5 (142,8; 185.8) g/m², p<0.05), highest prevalence of LV hypertrophy (LVH) (60.0% of type I). Cluster 2 had LVMMI of (116,9 (104,4; 163,1) g/m²), 55.0% prevalence of LVH plus 30.0% of concentric remodeling, lowest E’ (8,32; 10,60) cm/sec, relatively low PWP (9,23 (8,83; 13,03) mmHg) and lowest prevalence of LVDD (60,0% of type I). Cluster 3 (p>0,05 vs control group) had intermediate characteristics of men-

0383
The peculiarities of structural and functional state of myocardium and daily blood pressure profile in hypertensive patients with diabetes mellitus
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Purpose: To establish the relationship between structural and functional parameters of the left ventricle (LV) and daily blood pressure profile (BP) profile in patients with arterial hypertension (AH) of II stage comorbid with type 2 diabetes mellitus (DM2).

Methods: 68 patients (32 men and 36 women, mean age 49,6±5,2 years); 32 – with isolated hypertension (group 1), 36 – with hypertension and DM2 (group 2) were examined. We evaluated the data of transthoracic echocardiography and parameters of ambulatory blood pressure monitoring.

Results: Patients of the 1st group had a significant increase of the LV posterior wall dimension (LVPWd) – 14% (p < 0,05 ) and left atrial size – 17% (p < 0,05). In patients of the 2nd group a direct correlation between BP variability and LVPWd (r = 0,67; p <0,05) was revealed; as well as inverse correlation between daily average BP variability and a maximum velocity of early wave of mitral inflow (r = -0,31; p <0,05).

Conclusions: In patients with hypertension comorbid with type 2 diabetes mellitus the following changes can be observed: the increase of BP variability, predominance of concentric left ventricular hypertrophy (65% of patients) over the eccentric one (29% patients) with the formation of diastolic dysfunction and impaired LV relaxation (51% of patients).

0430
Features of carbohydrate metabolism, cytokines activity and I/D gene ACE polymorphism at patients with arterial hypertension and overweight
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The purpose of our research was to study features of carbohydrate metabolism, activation of the pro-inflammatory cytokine-interleukin-18 (IL-18) and anti-inflammatory cytokine-interleukin-10 (IL-10), I/D gene ACE polymorphism at patients with arterial hypertension and overweight. Design and Methods:103 hypertensive patients were examined, which have been divided...