0305
Interleukins 33 and 1B serum levels and common carotid arteries remodeling in hypertensive patients with obesity

Oleksii Honchar, Olga Kovalyova
Kharkiv National Medical University, Propedeutics To Internal Medicine No.1, Kharkiv, Ukraine

Objective: To investigate interrelations between interleukin 33 (IL-33) and IL-1β (IL-1β) serum levels and common carotid arteries (CCA) remodeling in hypertensive patients with obesity.

Method: 50 hypertensive patients (51 obese) have been observed. An ultrasound examination of CCA with estimation of its geometrical type was performed (cut-off value for vascular wall hypertrophy was vascular segment mass >0.275 g/cm, concentric remodeling was diagnosed with relative wall thickness of CCA >0.2). IL-33 and IL-1β serum levels were estimated using ELISA.

Results: IL-33 and IL-1β levels were higher in hypertensive patients (p<0.001), independently of BMI. Cluster analysis was made to reveal both cytokines' levels impact on CCA geometry (see picture). IL-33>73 pg/ml, IL-1β>25 pg/ml was associated with 80.0% prevalence of normal CCA geometry and 20.0% of its concentric hypertrophy. IL-1β>20 pg/ml with IL-33>71 pg/ml was characterized by 80.0% prevalence of normal geometry, 10.0% of non-hypertensive concentric remodeling of CCA, 9.0% of concentric and 5.0% of eccentric hypertrophy. IL-33>71 pg/ml with IL-1β>25 pg/ml was associated with decrease of normal CCA geometry prevalence to 50.0% with increase of concentric hypertrophy rate to 41.7%; other 8.3% patients had eccentric hypertrophy of CCA, IL-33>71 pg/ml, IL-1β>20 pg/ml (p=0.05 vs control group) had 57.9% of normal geometry, 15.8% of concentric remodeling, 15.8% of concentric hypertrophy and 10.5% of eccentric hypertrophy of CCA.

Conclusion: IL-33 and IL-1β serum levels were elevated in hypertensive patients independently of presence of obesity. A pronounced isolated increase in IL-33 level was associated with abrupt increase of CCA hypertrophy prevalence, especially its concentric variant. Accompanying increase in IL-1β level reduced this effect.

0473
Abdominal aortic aneurysms repair by entirely percutaneous endovascular approach using closure suture-based device. Prospective study of safety, feasibility and efficiency

Redouane Saady (1), Antoine Sauguet (2), Denis Doyen (1), Emile Ferrari (1), Jean Fajadet (2)
(1) CHU Nice, Cardiologie, Nice, France – (2) Clinique Pasteur, Cardiologie, Toulouse, France

Background: Endovascular repair of abdominal aortic aneurysms (AAA) is a well documented option. This approach is usually performed by surgical cut down of the common femoral arteries (CFA). Total percutaneous access for endovascular aortic aneurysm repair (creation of a proximal landing zone) has been reported. However high bleeding risk obese patients are still considered as bad candidates for this method.

Aims: We describe our experience of the entirely percutaneous vascular approach using the Prostar XL system, in our obese population in particular.

Methods: We analyzed 164 consecutive patients treated for AAA by endovascular percutaneous route between January 2007 and February 2012. Mean age of our patients was 76 years old. 25.8% of our population were obese (mean body mass index = 36). All patients were treated with a bifurcated endoprosthesis. The diameter of the introducer was 18-French (F) for the main and 12F for the controlateral access. The success rate of the procedure has been described elsewhere. A total of non-surgical 328 femoral access sites were closed with the Prostar XL system.

Results: The success rate of the entirely percutaneous vascular approach procedure was 94.5% and reached 100% in obese population, with a mean delay to hospital discharge of 6 days. Nine procedure failures were deplored. All procedure failures occurred on the 18F side while the success rate was 100% with 12F introducers (p=0.002). Re-hospitalization rate due to vascular access complication (haematoma, false aneurysm, femoral abscess) was 2.4%

0032
Analysis of blood pressure variability in the systolic hypertension with telemonitoring: feasibility and results on 108 patients

Patrick Dary
Cabinet de Cardiologie, Saint Yrieix La Perche, France

Purpose: Blood pressure (BP) and its variability (BPV) are associated with an increased risk for cardiovascular mortality. This observational study explores the benefits of patients telemonitoring using self-measured BP to optimise treatment and its usefulness in the variability analysis

Methods: Patients with uncontrolled hypertension were enrolled during an appointment. 2 SMBP were taken in the morning, at midday and in the evening at set times, the results being sent to a secure server. After 5 days treatment was started if the mean reading was more than 140/90. Variability analysis has been realized during all the follow up. The evaluation made at the end of the first 5 days to obtain the mean, standard Deviation (SD), coefficient of variation (CV), hight and low BP

Results: 63 women and 45 men. BP = 176/96 at inclusion dropping to 160/88 after 5 days under the same treatment. Therapeutic adjustments achieved over 12.7 days with significant decrease in BP to 143/82: –17 systolic and –6 diastolic (p<0.0001)

Conclusions: The variability is a guide to improve treatment.

0130
Plasma interleukin-18 levels depend on hypertriglyceridemic waist phenotype and gender in patients with arterial hypertension

Tetyana Ashcheulova, Ime Ime Etukudo, Olga Kovalyova, Abdal Nur
Kharkiv National Medical University, Internal Medicine, Kharkiv, Ukraine

The aim our study was to investigate cardiometabolic risk factors and plasma interleukin-18 (IL-18) levels in relationships with hypertriglyceridemic waist phenotype (HTGW) depend on gender of patients with arterial hypertension. The real time analysis allows the control of hypertension to improve (figure next page).