1 indexes in placental extracts up to 1174,77±17,34 pg/ml (in the control - 514,8±8,05 pg/ml; p<0,001) was registered. At the disease average severity the sAPO-1 level didn't exceed the values of 963,3±12,72 pg/ml (p<0,001). A simultaneous determination of the TNFα in placental extracts depending on the herpetic infection aggressiveness in the period of gestation illustrated a unidirectional growth of average indexes of the cytokine up to  $91,33\pm0,55$  pg/ml (p<0,001) and 72,32±0,71 pg/ml (p<0,001), accordingly, at the severe and average severity form of the disease (in the control - 21,63±0,38 pg/ml). Meanwhile, the Bcl-2 values in placental extracts at the herpetic lesion were of the multidirectional character. The severe course of the disease in the period of gestation was attended by the Bcl-2 level decrease up to 28,16±0,60 ng/ml (p<0,001), whereas at the average intensity of the disease the protein indexes increased up to 46,87±0,86 ng/ml (in the control – 8,73±0,32 ng/ml; p<0,001). Together with that the sincytiotrophoblast nuclei apoptosis intensity was evaluated. The antigenic load increase associated with 4,0±0,06% of apoptosis nuclei, and an average level of antibodies conformed to  $2,5\pm0,04\%$  (in the control -  $1\pm0,07\%$ ; p<0,001). The represented data allow concluding that the formation of resistance to the Fas-dependent apoptosis mediated by the Fas/FasL system is indicative of the sincytiotrophoblast in conditions of a herpetic lesion. Moreover, the sAPO-1 hyperexpression had no affect on the apoptosis occurrence. Maybe, the TNFα expression increase at the simultaneous weakening of the Bcl-2 protective action has become one of the probable causes of the sincytiotrophoblast nuclei apoptosis induction at the herpetic infection.

The work was submitted to international scientific conference «Present-day problems of experimental and clinical medicine», Thailand – Cambodia, February 18-28, 2009. Came to the editorial office on 16.01.2009.

## EARLY DETECTION OF ARTERIAL REMODELING IN ARTERIAL HYPERTENSION

Mineyeva E.E., Gvozdenko T.A. Research Institute for medical climatology and rehabilitation treatment, Siberian Branch of the Russian Academy of Medical Sciences Vladivostok, Russia

Scientists' attention is being increasingly focused on the issue of vascular membrane condition in arterial hypertension (AH), with a view to preventing vascular diseases. Consequently, research in this field is currently a topical issue. Since noninvasive methods have been developed, a number of studies came to rather contradictory results on arterial elasticity in AH. The aim of this research was to assess arterial elasticity during AH development, with the aim of early detection of vascular remodeling.

We examined 56 men, aged  $38.7 \pm 2.6$ . The  $1^{st}$  group consisted of 17 persons with high normal blood pressure – prehypertension, the  $2^{nd}$  group counted 24 patents with essential stage 1 hypertension, who did not receive any antihypertensive therapy. A control group included 15 healthy young men of the same age. The vascular elasticity was measured by the pulse wave velocity (PWV) method, using sphygmograph appliance «Polispektr-12» (Company «Neurosoft», Ivanovo). The data were statistically treated by the methods of descriptive statistics and software program «Statistica 6.0».

The research results showed a reliable increase of PWV for both muscular and elastic arteries in the study groups. Elasticity in the muscular arteries changed more intensively. For example, in the 1<sup>st</sup> group the muscular PWV doubled, in the 2<sup>nd</sup> group – increased by 36% (p<0,05) in comparison with the control group. PWV in the elastic arteries also rose, according to the hypertension stage: elastic PWV increased by 22% in the 1<sup>st</sup> group and by 24% (p<0,05) in the 2<sup>nd</sup> group. Expected unfavorable increase of the elastic PWV by more than 12 mps, which is an independent risk factor for cardiovascular diseases, was found at 9% of the patients: 1 person in the 1<sup>st</sup> group and 4 men in the 2<sup>nd</sup> group.

To sum up, signs of arterial remodeling appear at the prehypertension stage and 1 stage arterial hypertension. Measuring PWV at early stages of AH let detect a risk group in the population as early as possible.

The work was submitted to international scientific conference «Present-day problems of experimental and clinical medicine», Thailand – Cambodia, February 18-28, 2009. Came to the editorial office on 19.01.2009.

## PATHOLOGIC SITUATIONS AIDING DEVELOPMENT OF RADICULOMYELOISCHEMIC DISORDERS AT LUMBAR OSTEOCHONDROSIS

Oleynik A.D.

Regional Clinical Hospital of Josaphat Sanctifier Belgorod, Russia

At disk herniation there is a range of factors promoting lumbar osteochondrosis clinical signs' manifestation and, especially, circulatory disturbances in spinal cord and spinal roots. Their timely diagnostics and release, no doubt, create favourable conditions for the given vertebral column pathology treatment improvement.

With this objective in view we have carried out a detailed retrospective analysis of 1848 lumbar osteo-chondrosis patients' integrated survey and treatment data.