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 ± 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 1st group the muscular PWV doubled, in the 2nd 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 1st group and by 24% (p<0,05) in the 2nd 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 1st group and 4 men in the 2nd 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.

Among the patients the occurrences of radiculoischemia were detected in 302 persons (16,3%), myeloischemia – in 111 patients (6,0%). Among the myeloischemic syndrome patients in 83 (74,8%) cases it was combined with occurrences of radiculoischemia. Hence, the radiculoischemic syndrome or radiculomyelopathy occurred in 330 surveys (17,9%).

Thereat, it was detected that against the background of intervertebral disks' changes there are factors promoting the manifestation of clinical signs of circulatory disturbances in spinal cord and roots.

A narrow spinal canal detected in 24 patients (7,3%) is referred to these factors. The vertebral foramen stricture was found out in 79 cases (23,9%). The vertebral foramen stricture was either congenital or acquired. The acquired stricture was conditioned by changed bone structures, hernial outpouching of the intervertebral disk, the cicatrical-adhesive process in this region and various combinations of these factors. From 330 radiculoischemic syndrome patients the instability in spinal motional segments was found out in 117 (35,4%) persons, that allows considering this pathological situation as one of the factors promoting circulatory disturbances both in the radiculae and spinal cord. One of the causes of circulatory disturbances in the spinal roots and spinal cord is the cicatricaladhesive process development both in the pre-surgical period and especially after a surgical aggression. Among the radiculomyeloischemic syndrome patients the cicatrical-adhesive process in the region of radiculae at the disk hernation level was found out in 46 persons (13,9%). And, finally, in 13 persons (3,9%) the development of radiculomyeloischemic phenomena was conditioned by the appearance of a liquor block as a result of a well-marked compression of the intervertebral disk by the hernia and the presence of cicatricaladhesive changes at this level.

The analysis of remote results of the operative therapy of diskogenic lumbar radiculomyeloischemias in 267 patients allowed establishing that after an essential or complete regression of ischemic disturbances in the long-term post-surgical period the circulation disturbance relapse in the spinal cord and radiculae took place in 25 persons (9,4%).

Clinically it was manifested by the pain syndrome nascence or spurt against the background of a favourable or relatively favourable post-surgical period for the period of not less than a year. Then acutely (within several hours) or subacutely (within several days) a well-marked clinical picture in the form of a radiculoischemic or radiculomyeloischemic syndrome developed.

The data analysis of the integral survey of 25 patients with a diskogenic post-surgical relapsing radiculomyeloischemic syndrome allowed establishing that the operated intervertebral disk hernia relapse occurred in 14 persons (56,0%), the cicatrical-adhesive process availability in the region of surgical

aggression – in 6 patients and the combination of diskal hernia relapse and epiduritis – in 5 cases (20,0%).

However, the ischemic disturbances in long terms after surgical interference were registered in the patients earlier operated on the lumbar osteochondrosis without radiculomyeloischemic phenomena in the pre-operative period. From 330 patients with the presence of radiculomyeloischemic disturbances a similar situation was observed in 12 persons (3,6%).

In such cases the progression of degenerative processes in the intervertebral disks adjacent to the operated one takes place. This very fact aids the development of the radiculae' and the attending vessels' compression in the presence of functionally meaningful vessels at this level.

Clinically it is manifested by the radiculalgia nascence or spurt in remote terms of the favourable post-operative period. In all the 12 persons a well-marked clinical picture of radiculoischemia or radiculomyeloischemia developed acutely (within several hours) or subacutely (within several days) for the period of not less than 3 years after the operation.

We define a similar manifestation of the disease in the patients earlier operated on the lumbar osteochondrosis not complicated with ischemic disturbances as a syndrome of diskogenic post-operative remote ischemia of the spinal cord and radiculae.

The cause of the nascence of circulatory disturbances in the spinal cord and roots of the spinal nerve can be not only the development of hernial outpouching of the intervertebral disk at another level, but also progressing pathological changes in the region of surgical aggression in the form of a cicatrical-adhesive process and instability in the lumbar spine. A similar manifestation of the disease occurred in 3 patients from 12 earlier operated on the lumbar spine osteochondrosis not complicated with ischemic disturbances.

The findings testify that:

- 1. At disk herniation there is a range of factors promoting the manifestation clinical signs of circulatory disturbances in the spinal cord and spinal roots. The narrow spinal canal, vertebral foramen stricture, cicatrical-adhesive process, instability in spinal motional segments and liquor block are referred to them.
- 2. In 9,4% of the cases in remote terms after the operation a relapse of the radiculomyeloischemic syndrome occurs due to the earlier operated intervertebral disk hernia relapse, the cicatrical-adhesive process development in the region of surgical aggressionor combination of the diskal hernia relapse and epiduritis.
- 3. In 3,6% of the patients earlier operated on the lumbar osteochondrosis without radiculomyeloischemia phenomena the ischemic disturbances conditioned by both intervertebral disk hernia at the level neighboring to the operated one and epiduritis and instability of the spine in the region of surgical intervention develop in remote terms after the operation.

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.

INFLUENCE OF PHENIBUTE ON IMMUNE STATUS AND BEHAVIOR REACTIONS OF RATS WITH IMMUNE INSUFFICIENCY

Samotrueva M.A., Tyurenkov I.N., Teply D.L., Luzhnova S.A., Ovcharova A.N. Astrakhan State Medical Academy, Astrakhan, Russia

Volgograd State Medical University, Volgograd, Russia

Astrakhan State University, SRI of Studing lepra of RHS, Astrakhan Base Medical College, Astrakhan, Russia

Appeared in last years numerous data about single neuroimmune regulator many physiological and pathological processes in organism eventuate topical research of neuroimmunomodulate properties of medicinal remedies.

The aim of this work is experimental research for influence derivative GABA – phenibute on immune and psychoemotional status of rats with immune insufficiency.

The experiment has been made with 70 rats of the line Wistar mass 200-250g. The animals were distributed on the groups: control group N_2 1 – the immunizing animals, receiving physiological solution; control group № 2 – the immunizing animals with immune insufficiency, which injected cyclophosphamide (once intraperitoneum in the doze of 125 mg/kg), with the aim of suppression of immune system. And the experienced group - animals with immune insufficiency receiving phenibute (intraperitoneum in the doze of 25 mg/kg in the space of an hour after injected immunodepressant). Immune status of animals were studied by reactions of hypersensitivity delayed type (RHDT) and passive hemagglutination (RPHA). By way of antigen load were used erythrocytes of sheep. Behaviour reactions of animals were studied in the test «Open field».

In the course of the carried our tests it was fixed that the single inside peritoneum leading cyclophosphamid in the doze of 125 mg/kg is conducive to simulate immune insufficiency showing of lowering index RHDT 28%, (p_1 <0,05), suppression of production antierythrocyte antibody in RPHA 58% (p_1 <0,05), and also change psycho emotional condition accompanying of lowering of motional and investigation activity in the test «Open field» (p_1 <0,05).

The single inside peritoneum of phenibute in the doze of 25 mg/kg to the animals with the immunological insufficiency is accompanying with the stimulating action with the regard to the cell section of the immune reactivity, it reveals itself with the increase of the reaction index RHDT more than 50% not only by comparison with the animals from the control group N 2 (p_2 <0,05), but more than 40% with respect to the exponents in the rats groups, receiving «placebo» (p_1 <0,05).

In research of influence phenibute to formation antierythrocyte antibodies in RPHA is determined its modulate influence, it reveals itself with the increase of the reaction more than 50% to the group of animals, which for formation of immunosuppression injected cyclophosphamide. As compared with control №1 it didn't supervise to change of level of antibodies.

In research of influence phenibute on psycho emotional condition of immunodepression rats detected ability of preparation to correct changing behavior reaction developing in condition of cyclophosphamidinduce immune insufficiency. Under influence of phenibute occurs reconstruction of horizontal and directional investigation activity (p_2 <0,05); decrease of defecation (p_2 <0,05) and grooming (p_2 <0,05), duration of friezing (p_2 <0,05), and also increase of amount of passages through central zone «Open field» (p_2 <0,05).

That's why, received results during experimental test showing of the ability of phenibute to liquidate acute immune disturbance, but correct changing behavior reaction, appearing in the result of immunopathology.

The work was submitted to IV international scientific conference «Basic Research», Dominican Republic, April 12-22, 2009. Came to the editorial office on 08.02.2009.

INFLUENCE OF HOMEOPATHIC VEROSHPIRON ON THE MAMMARY GLANDS WITH CYSTIC MASTOPATHY IN THE EXPERIMENT

Svirina Zh.A., Svirin V.A., Vithoulkas G., Chumachenko P.A. Ryazan State Academician I.P. Pavlov Medical University Ryazan, Russia

According to the World Health Organization mammary gland cancer in women is the first (as far as localization is concerned) in the structure of morbidity which constitutes 18% of the total number of malignant tumours. In order to decrease morbidity it is necessary to investigate different ways of influence on the mammary gland precancer processes to which cystic mastopathy is related.

In the intact series veroshpiron contributes to development of the mammary glands. Under its influence there is slight enlargement of the ducts, height of the epithelium and increase in secretion. In case of cystic mastopathy 4 week course of veroshpiron in therapeutic doses causes manifested regress of the cysts. There is complete reverse development of the