

1st group patients and 62,5 % of the 2nd had ischemic disease of the heart . In the 1st group there were 5 patients with infarct of myocardium, 3 of them had "muted" form, and 4 had arrhythmia. 42 % of patients of group 1 and 62 % of patients of group 2 were put a diagnosis aorta atherosclerosis with transition to the base of velum of aorta and mitral valves. 60% and 65% accordingly suffered from arterial hypertension (Blood pressure > 140/90 mm.Hg). Ultrasonic research of abdominal cavity revealed signs of pancreatitis with 84 % of the 1st group patients and 61 % of people of group 2. Approximately identical quantity of patients had signs of cholecystitis, gallstone, pyelonephritis, urolithic illness. Biochemical parameters revealed authentic distinctions of lypoproteid level ($p < 0,05$) of high density (HDL). The 1st group patients had higher level of HDL ($1,42 \pm 0,12$ ммоль/л) in comparison with parameters in group 2 ($0,76 \pm 0,13$ ммоль/л).

CONCLUSIONS. The examination of Yakuts showed that diabetic microangiopathia of various degrees is diagnosed with the duration of disease up to 10 years. Thus, searches of the various genetic factors providing higher or lower susceptibility of microvascular bed of target organs to the influence of metabolic factors are proved. As for macrovascular complications, the ischemic disease of the heart incidents among native people of the North are revealed more rarely than among Russians, possibly due to protective action of high level of high density lipoproteins. Clinical features of ischemic disease of the heart with Yakuts suffering from DM indicate that they have autonomical neuropathy.

The article is admitted to the International Scientific Conference "Modern High Technologies, Medical Sciences", Spain, Tenerife, 2006, November 20-27; came to the editorial 09.10.06

THE INFLUENCE OF A NEW ANTIOXIDATIC PREPARATION ON THE REPRODUCTIVE FUNCTION OF MALE-RATS

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In the group of N₉ – substituted of Imidazobenzimidazoles it has been revealed a new antioxidant substance, surpassing of an antioxidant preparation of mixidol (V.A.Kosolapov, 2003) in efficiency. Toxicological researches proved that this substance is less toxic. LD₅₀ is 1680 mg/kg, the therapeutic index is 336 c.u., in intragastric administration, but a safe diapason of therapeutic activity is 12 c.u. in which the dose of 5 mg/kg corresponds to the lower level of safe therapeutic action, and a dose of 60 mg/kg - to the top level. Thus, the gonadotrophic properties of this substance were subjected to investigation in further researches.

The purpose of the present research was to study the influence of a new antioxidant substance on the generative function of male-rats.

The experiments are carried out on 90 male-rats (60 males and 30 females) with the mass of 180 gramm, keeping the rules of the International convention on the protection of the vertebrates (Strasbourg, 1986).

During the researches the males have been subdivided into 3 equal groups. The investigated substance was introduced per os in a doses of 5 and 60 mg/kg, (1 and 2 group) for 2 months, the 3-rd group was intact. A sexual behavior, the spermiogramme have been studied and a gonad morphometry was performed. The duration of latent period and sexual activity, the number of approaches of male to female and number of coupling with intact female-rats were studied. To investigate the male's spermiogramme male-rats were subjected to ether narcosis. The testicles and epididymis were extracted. The spermatid substance from epididymis was taken to calculate number of normal and pathological forms of spermatozoons and period of their motility. Testicles were subjected to histological

processing for morphometry's research. Statistical data processing was carried out with Microsoft Excel programme.

As a result of researches it is revealed, that the latent period reduced (20-30 %) and duration of sexual activity increased in male-rats of 1 and 2 groups. At the same time, the amount of male's approaches to females increased 2,5-fold in time the 1-st group of male-rats. Then, the same changes in males of the 2 group was found in a lesser degree (10-15 %).

The reliable growth of total number of spermatozoons (17 and 34 %) and the prolongation of the period of spermatozoons's motility 15 % was revealed in spermogram of experimental groups of males at the same time.

The amount of pathological forms corresponded to the control rates. The tendency of decreasing of gonads mass coefficient (10-12 %) and growth of epididymis mass coefficient (8-10 %) was revealed during gonads's morphometry in males, receiving the substance in doses of 5 and 60 mg/kg.

It is established, that the index of a spermatogenesis in these animals did not change, and the canalicular number in testicles with the desquamated epithelium increased

The results of researches showed that new antioxidant substance of some N₉-substituted of Imidazobenzimidazoles activates the sexual motivations of males, stimulates spermatozoons's emission from testicles to epididymis and influences the morphostructure of gonads's canals, depending on the dose.

The article is admitted to the International Scientific Conference "Prior Directions of Scientific, Technological and Engineering Development" Egypt, Sharm-El-Sheikh, 2006, November 20-27; came to the editorial office on 30.10.06

KARYOTYPE CHANGE OF CEREBRUM CELLS IN LEUKAEMIA DISEASE

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Leukaemia (leucosis) - is a system progressing accretion of the primitive tumor burden in blood-making organs with hematogenic dissemination in other organs and tissue. The etiology of leukemogenesis is factors, which can cause the mutation of blood making cells: Viruses, Ionizing radiation, Chemical agents, Immunodeficiencies, Genetic factor, Panmyelophthisis.

The foundations for the diacrisis of the oncohematological diseases were laid down by the works of the A.A. Maksimov's followers, the hematologists I. L. Chertkov and A. Ya. Fridenshtein. The 5th level of survivability of the patients with hemoblastosis is still low. There are initial changes of the karyotype among the variety of the chromosomal anomalies. Such changes are typical for the certain variants of leukosis and concern the disease process. The changes in structure, with oncogene, growth factor gene, cell receptors and other bioactive genes involved, attribute to the initial and specific changes of chromosomes. The transgenesis, gene activation and loss, which control the oncogene functioning in the normal genome, and also the new DNA sequences formed by the translocation, play a great role in the processes of the neoplastic mutation. While working we have found the following cytogenetic changes:

del(6)(q21); 45,XY(-3); der(17); 45,XY(-7); t(15;17)(q21;q22); t(9;22)(q34;q11); inv(16); t(11;19)(q23;p13); inv(8)(p11;q13);

the polyploid variants of cerebrum cells karyotype. There are also nonspecific or post primary aberrations, which can come cause of the neoplastic proliferation and represent the processes of cloned evolution of leukemia cells. The post primary changes are not unique. The same changes are described in the different neoformations. But such changes present in the karyotype of the patients and have influence on the course of the disease. In recent years the great attention was paid to the role of some