

natural anomalous region more than 20 years were divided into two subgroups. The first subgroup included the workers of open-cast mine (they contacted with the uncovered magnetic ore), the second subgroup consisted of the operators, which serviced magnetic separators (the source of industrial EMF).

The general (BA) and proper biological age PBA has been defined by the method of V.P.Voitenko et al., 1984 as the integral index of the functional state in dependence on age-related disturbances. The difference between BA and PBA determined the rate of the person ageing. The significance of it is equal ± 5 years estimated as physiologic (normal) ageing, more than 5 years - accelerated ageing. The delayed ageing was characterized by the low level of BA (proper BA was considerably more than BA).

Rates of ageing at workers of experimental group have made $13,4 \pm 1,8$ years, and were authentically above, than in control group ($7,1 \pm 0,4$ years; $p < 0,05$). At quarry' workers and the persons serving magnetic separators of concentrating factory, authentic differences in rates of ageing it is not revealed: accordingly $15,3 \pm 2,9$ years and $12,1 \pm 1,6$ years.

59% workers from experimental group and 11% workers of rubber production plant had premature rate of ageing. 64,5% of quarry' workers and 55% of men serving magnetic separators had accelerated rate of ageing.

The most frequent pathology was arterial hypertension (AH) in the both workers' groups (35% workers from the ore concentrating factory, 16,1% from quarry' workers). Only 12% workers in control group suffered AH. Majority of workers (83%) had the premature ageing.

Conclusion. Prolonged exposure of abnormal natural magnetic field and industrial EMF in KMA region often lead to the acceleration of ageing processes. One of the main reasons of worker's premature ageing was AH.

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PRIORITY OF GLUTATIONPEROXIDASE AND GLUTATIONTRANSFERASE ACTIVITY CHANGES AT CHRONIC ADENOIDITIS AND THEIR REVERSIBILITY

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High percentage of chronic adenoiditis (CA) among children, comparative resistance, and, in vivid cases, – little reversibility of the pathological process afflicting almost only children, - all this adds great significance to the problem of CA prophylaxis and treatment.

Aim: testing the state of antioxidant system at chronic adenoiditis among children, the optimization of remedial measures.

Materials and Methods: during randomized, prospective, controlled, simple blind clinical research the content of cytosolic enzymes of the antioxidative system – superoxide dismutase (SOD), catalase, glutathionperoxidase (GPO) and glutathion-S-transferase (GST) in the erythrocytes of 72 children with authentic diagnosis 'chronic adenoiditis' before and after care with a complex homeopathic preparation "Tonsilotren" (DHU, Germany). The control group consisted of 16 donors who had no chronic, somatic or ENT-pathology in the anamnesis and hadn't got any drug therapy for the previous month because of acute respiratory viral infection or any other nosology.

Results: GST enzymes' activity decrease ($(1,100 \pm 0,118)$ mmol/min*ml cells ($P < 0,05$)) and GPO ones' ($(4,36 \pm 1,00)$ mmol/min*ml cells ($P < 0,05$)) in erythrocytes of the children with chronic adenoiditis was established, that affords ground for supposing their priority at the given nosology. The results of SOD and catalase activity in the erythrocytes had no authentic differences.

The reversibility of the showings after the therapy with "Tonsilotren" reflects functional recovery activity of the enzymatic antioxidative system when the adaptation tension at chronic adenoiditis is developed.

Conclusions: the confirmation of the biochemical aspects of pathogenesis of chronic adenoiditis among children and the possibility to correct them has outlined the perspectives of pathogenetic therapy. The GPO and GST correction against the background of complex homeopathic preparation "Tonsilotren" is an indirect predictor of its efficiency. The specified fact gives us title to work out not only a pathogenetically new method of care of chronic adenoiditis, but also rehabilitation programs during the remission period, that is in accord with the principals of immune rehabilitation at chronic infective inflammatory diseases.

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DYNAMICS OF LATE COMPONENT OF BLINK REFLEX AMONG PATIENTS WITH HYPOTHYROIDISM

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Physiological effects of thyroid hormones are spread practically onto all aspects of an organism's vital activity. Being under the controlling influence of direct and humorally mediated nervous impulses the thyroid gland, in its turn, affects formidably the processes occurring in different levels of the nervous system. There are the data about a greater sensibility of nervous processes to thyroid hormones compared to those occurring in other tissues of the body. This is known to become apparent especially on the early stages of ontogenesis.

The importance of studying of motor disorders' nature question at the deficit of thyroid hormones circulating in the body was underlined by many clinicians and pathophysiologists. The nature of dyskinesia at hypothyroidism was regarded by different authors according to two main concepts about the mechanism of thyroid

hormones' action – immediately on the muscular tissue or nervous system-mediated.

While considering the effects of thyroid hormones in the whole body, one should take into account the multiplicity of their action's application points, and first of all their influence on the majority of tissues' metabolism. On this basis it is hardly correct to restrict the nature of motor function's disorders at hypothyroidism to soft tissue involvement only. The morphological research showed that there are authentic proofs both for the first and the second points of view.

Movement control is a complex coordinated influence of different levels of nervous system on the end-point organ of motor apparatus – muscles. The deficit of thyroid hormones affects the function of nervous centers, and that can't help playing a significant role in the nature of locomotion disorders.

Until present time the question of the functional state of over-segmental brain parts at hypothyroidism is being open. Meanwhile these data can be of concern for understanding dyskinesia pathogenesis at thyroid gland diseases.

Our work was aimed at studying clinic and neurophysiologic characteristics of reflex action of the neuromotor system among patients with hypothyroidism. To do it we examined 20 people with primary hypothyroidism. 20 healthy volunteers formed the control group. Alongside with general clinical trial and the evaluation of their neurologic state, all patients were subjected to the thyroid gland function test by IFA methods, ultrasound investigation and biochemical analysis of blood with lipid specter defining.

Among the surveyed patients with hypothyroidism there were 3 men and 17 women, that confirms the data about the greater frequency of the disease among women. The majority of the patients were 45-50 years old. The research included the patients with new-onset primary hypothyroidism and long-term noncompensated ones. The level of free T4 was $6,8 \pm 2,7$ pmol/l (norm is 10-35), the level of TTG - $17,05 \pm 2,7$ mcME/ml (norm is 0,3-4,0).

The patients complained of muscle weakness, fatigability and slowness of movements that lead to fall off in working efficiency. In the neurologic state the muscle