

Considering this circumstance, the estimation of severity level of invalidism due to lower extremities amputations has been spent, the differentiated estimation of volume of an operative

measure in points is thus used (P. Vorobiyov et al., 2001).

In table 2 are presented indicators of invalidism factor for the 1-year period of observation.

Table 2. Gravity of an invalidism in investigated groups during observation period.

Indicator	Nursing teams (group A, n=137)	" Typical practice " (group B, n=239)
Quantity of the patients who have transferred amputations, in the given group (absolute value)	7	28
The total quantity of points characterizing gravity of an invalidism	13	124
Factor of gravity of an invalidism	1,86	4,43

A year later at the patients consisting under observation of nursing team, invalidism severity level has appeared much lower, than at typical practice: 1,86 against 4,43.

Degree of mobility of patients was estimated in dynamics on the modified scale of gravity of the vital activity restrictions recommended by the "International Classification of Functioning, Vital Activity and Health Restrictions" (2001). The received results reflect positive dynamics of expansion of mobility of patients in group of sisterly observation where a year later the share of patients with serious restrictions of mobility ($p < 0,05$) has authentically decreased.

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A NEW METHOD OF TREATING STAPHYLOCOCCUS CARRIER STATES

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The aim of the investigation was to study Staphylococcus aureus carrier state on the upper respiratory mucous membrane among healthy population and to develop a new method of its correction.

Material and methods. Bacterial status was studied in 1600 healthy subjects of reproductive age, with 192 cases being registered to carry Staphylococcus aureus on their upper respiratory mucus. Comparison group composed 60 patients - Staphylococcus aureus carriers who were treated by probiotics in combination with aeroionotherapy. Nasopharyngeal microflora was studied by the conventional bacteriological method.

Results. 12% healthy subjects proved to be Staphylococcus aureus carriers. Pathogenic staphylococci were revealed in all the subjects examined.

The available methods of treating the rhinopharynx are numerous, though not always efficient and harmless (Onishchenko G.G.). The method we suggest implies administration of an enzyme probiotic having an antibacterial effect in combination with a flow of negative air ions inhaled 20 minutes daily over a period of 10 days. "Balance-naryne-F" which contains products of acidophilus lactobacillus activity was used as an enzyme probiotic with an antibacterial effect against a number of pathogenic microorganisms. Aeroionificator "Spherion" was used as a source of negative air ions flow. "Balance-naryne-F" is absolutely harmless, has no contraindications and is well tolerated. The everyday apparatus "Spherion" helps stabilize redox processes in respiratory cells; it yields a flow of negative air ions amounting up to 1000 units per 1 ml air (Hygiene Rules

2.2.4.1294-03, 2003). In the course of the study 60 subjects were treated by the new method, with Staphylococci recurrence rate being registered only in 2 cases (3%), without any allergic reactions or any other complications.

Conclusions. The method suggested for treating bacterial carrier states allows to exclude any pathogenic staphylococci in respiratory discharge in 97 % cases, as well as to prevent any possible complications in the subjects suspected to be bacterial carriers.

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RATS' BLOOD PROTEOLYTIC ENZYMES' ACTIVITY SEASONAL MANIFESTATIONS FEATURES

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There is much enough material integrating the data about the role of proteolysis. The majority of these publications has a biochemical pattern in general and gives no comprehensive idea of the proteolysis value in chrono-physiological processes.

The purpose of the present work has been the study of the blood proteolytic enzymes' activity seasonal dynamics.

White both sex non-pedigree rats weighing 200-270 g were used as the research objects. 3 sets of experiments with regularity of 10-15 days were carried out each season of the year. Every hour blood samplings were taken during the day using the decapitation method. In all the blood samples the level of general proteolytic activity of blood (GPA) and total protein amount of plasma were determined. The accumulation of free amino acids and peptides having NH_2 -groups in the probes incubated within 4 hours at 37°C was considered to be the GPA level index. The findings were stated in mcg of glycine per 1 ml of plasma (or erythrocytes) for an hour of the incubation.

According to the research results the proteolytic blood system is the most active in the autumn-summer period of the year. The level of proteolytic activity of plasma enzymes in autumn makes $43,3 \pm 0,9$ - $64,9 \pm 0,8$ mcg Gly/ml/hour, in summer - $40,4 \pm 0,9$ - $62,7 \pm 1,1$ mcg Gly/ml/hour; the activity of erythrocyte proteases is $140,3 \pm 3,6$ - $161,9 \pm 5,6$ mcg Gly/ml/hour and $140,0 \pm 2,9$ - $153,7 \pm 1,3$ mcg Gly/ml/hour, accordingly. In winter and spring season the activity of proteolytic

enzymes reduces considerably: in spring the level of plasma proteases makes $35,0 \pm 1,6$ - $60,2 \pm 1,1$ mcg Gly/ml/hour, in winter - $38,0 \pm 0,9$ - $60,7 \pm 1,0$ mcg Gly/ml/hour; the activity of erythrocyte proteases is $137,3 \pm 1,9$ - $149,4 \pm 2,3$ mcg Gly/ml/hour and $108,8 \pm 6$ - $135,7 \pm 3,8$ mcg Gly/ml/hour, accordingly. We have managed to determine a little difference in the dynamics of spring-winter manifestations of proteolysis activity in plasma and erythrocytes. In erythrocytes the proteolysis takes place more actively in spring, and in plasma – in winter.

The distribution of total protein amount indexes in blood plasma in different seasons of the year allowed determining the presence of the given parameter seasonal fluctuations. Thus, the total protein maximal level in plasma is registered in autumn and summer periods of the year: $73,4 \pm 3,8$ - $95,3 \pm 4,3$ g/l and $65,0 \pm 3,8$ - $81,9 \pm 4,3$ g/l, accordingly. A considerable protein reduction is registered in spring and winter periods: $51,03 \pm 0,4$ - $73,4 \pm 1,1$ g/l and $46,4 \pm 2,5$ - $63,4 \pm 3,6$ g/l, accordingly.

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CIRCADIAN DYNAMICS OF BLOOD PROTEOLYTIC ENZYMES' ACTIVITY IN RATS

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Thanks to present-day achievements of enzymology, proteolytic enzymes have become common use in medicine. Proteases play an extraordinary role in protein metabolism, klenodusity (blood coagulation, clot lysis), immune responses, morphogenesis, cell-cell interactions, oncogenic transformation, virus pathogenicity, etc.

The purpose of the present work has become the study of the circadian dynamics of some physiological parameters of blood.

White both sex non-pedigree rats weighing 200-270 g were used as the research objects. Every hour blood samplings were taken during the day using the decapitation method. In all the blood samples the level of general proteolytic activity of blood (GPA), total protein concentration, the amount of erythrocytes, leucocytes, hemoglobin were determined, the plasma pH was measured. The accumulation of free amino acids and peptides having NH_2 -groups in the probes incubated within 4 hours at 37°C was considered to be the GPA lev-