

plasma and the catalase activity in erythrocytes were investigated. The level of initial (hydroperoxide of lipids) and final (malondialdehyde) lipoperoxidation products in blood by the spectrophotometric method was determined.

The DLP formation in rats was attended by the lipid peroxidation products accumulation and general antioxidant and catalase blood activity decrease. After using AG the catalase activity increase and the lipid hydroperoxide level decrease in blood plasma were detected in the rats, the TAA normalization and tendency to malondialdehyde concentration decrease were registered. The research findings can testify to antioxidant properties of natural AG, that gives an opportunity to extend the ADG-containing lipids' application at various pathologies attended by the decrease of antioxidant state of the body.

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**EFFICIENCY OF PREVENTIVE MAINTENANCE PROGRAM IN DIABETIC FOOT PATIENTS AT OUT-PATIENT STAGE**

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During 1999-2004 we have developed and implemented an organizational model of nursing aid to the patients with diabetic foot syndrome (DFS) at out-patient stage. For further research of preventive maintenance program with use of nursing teams, 386 patients have been parted in two groups.

In the first group were 137 DFS patients with mentions of the moderate and expressed restriction of mobility due to age, main and accom-

panying diseases. These patients were actively observed by nursing teams during one-year follow-up. The given group is designated further as group A or group of active home nursing. The second group was made from 239 DFS patients, living out of district of service of the specified clinical bases and consequently inaccessible to observation domiciliary. All of them continued to be observed under the traditional scheme within a year from including in research, periodically they were invited on reception in diabetic foot offices according to prophylactic medical examination rules. This group has been designated as group B or group of typical practice. Both groups of patients during observation received a standard complex treatment depending on type and gravity of diabetes and current form of DFS.

After comparison of sex, age, terms and features of current diabetes, there were not revealed essential differences in both groups. Authentic differences between groups consisted only in degree of mobility restriction and also in frequency of previous amputations which have appeared higher in group A.

The analysis of clinical and social efficiency of preventive actions was performed after 1 year of observation by following criteria:

- quantity and gravity reduction of purulent-necrotic and other DFS complications in observable patients;
- healing terms, depression of amputations level;
- dynamics of the basic indicators of quality of life (QoL);
- frequency and a length of hospital stay concerning DFS;
- patient's estimation of efficiency of home nursing.

The analysis of lower extremities amputations frequency for the one-year observation period has taped authentic prevalence of this indicator ( $p < 0,05$ ) in «typical practice» group of patients - table 1.

**Table 1.** Comparison of amputations frequency and level in investigated groups during observation (on 100 patients).

Level of amputations	Nursing teams (group A)	" Typical practice " (group B)
Fingers and feet	5,1	7,5
Shin	-	0,8
Hip	-	3,3
The general frequency	5,1	11,7

Among the patients of group A high amputations (at shin and hip level) for the 1-year period of observation were absent, that speaks about more active observation domiciliary. At the same time

variants of various operative measures and their combination at patients were various and variously influenced quality of the further life.

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