

**Frequency and character of the oral mucosa damages in the workers engaged in the manufacture of the synthetic detergents
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**Частота и характер повреждений слизистой оболочки полости рта рабочих синтетических моющих производств
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Abstract: *the unfavorable factors of the manufacture of the synthetic washing and cleaning agent have negative effects on frequency and character of pathological processes in the oral cavity mucosa and lips of the workers participating in this process.*

Аннотация: *неблагоприятные факторы изготовления синтетических моющих и чистящих средств оказывают негативное воздействие на частоту и характер патологических процессов в слизистой оболочке полости рта и губ рабочих, участвующих в этом процессе.*

Keywords: *character of the oral cavity mucosa, workers of the manufacture of the synthetic detergents.*

Ключевые слова: *характер слизистой оболочки полости рта, рабочие производства синтетических моющих средств.*

At the present time due to the deep social and economic changes in Uzbekistan the main principle of the state policy was warranting the safe working conditions and saving health of the working population. Particularly this concerns of the prior pollutants of the environment for which the enormous powers of manufactories, stability in the environment, ability of the chemical substances to the distribution are characteristic [1, 2].

The purpose of this investigation was to prevalence and character of the oral cavity mucosa in the workers of the manufacture of the synthetic detergents.

Materials and methods. The study of a condition of the oral mucosa was undertaken on 500 workers of the Navoiy and Almalik chemical plants producing household chemicals in Uzbekistan (main study group) using the WHO strategies. As the control there were examined 500 employees of administration, electrical engineers, mechanics, watchmen, population living in the surroundings of the plants, but without exposure to the effect of the chemical enterprises.

Results and discussion. The results of the researches performed have shown (table), that among workers participating in the manufacture of washing and cleaning agents there is determined higher ($p < 0,001$) frequency of the oral cavity pathology than in the control group. So, there were more frequently observed allergic stomatitis (20,3 %), leukoplakia (17,8 %), allergic cheilitis (14,4 %) and chronic recurrent aphthous stomatitis (10,4 %), a some less often - allergic glossitis (9,8 %) and desquamative glossitis (9,6 %) and more less – exfoliate cheilitis (8,6 %) and chronic ruptures of lips (6,5 %). At workings of control group the first place is occupied by chronic recurrent aphthous stomatitis (7,5 %), second place – by desquamative glossitis (7,4 %) and upward allergic stomatitis (5,6 %) and exfoliate cheilitis (2,2 %). It is necessary to note, that in workers at manufacture of the detergents there were occurred such diseases of the mucous mucosa (33,5 %), as hyperkeratosis and erosive-ulcerative forms of leukoplakia, allergic cheilitis and chronic ruptures of lips which were absent in the studied participants of the control group. Allergic stomatitis and allergic glossitis were found in the both comparative groups, however their frequency among the working people was 3,9 times more frequent ($p < 0,001$) than in the control group.

Table 1. Frequency of the oral cavity damages in the workers of the manufacture of synthetic detergents (studied group) in comparison with persons of the control group ($M \pm m$, per 100 studied)

Disease	Group of studied persons		P
	studied	control	
Stomatitis, totally	38,8 \pm 4,3	14,3 \pm 1,4	<0,001
Of them: allergic	20,3 \pm 2,3	5,6 \pm 0,4	<0,001
Chronic, recurrent aphthous	10,4 \pm 1,4	7,5 \pm 0,6	<0,01
Candidiasis	8,1 \pm 0,7	1,2 \pm 0,2	<0,001
Leukoplakia, totally	17,8 \pm 2,1	2,8 \pm 0,2	<0,001
Of them: simple	5,2 \pm 0,9	2,8 \pm 0,2	<0,01
hyperkeratoid	8,4 \pm 0,8	-	<0,001

Erosive - ulcerative	4,2±0,5	-	<0,001
Allergic glossitis	9,8±1,1	2,1±0,4	<0,001
Desquamative glossitis	9,6±1,2	7,4±0,8	<0,05
Lip lesions, totally	28,5±2,9	7,2±0,7	<0,001
Of them: allergic cheilitis	14,4±1,3	-	<0,001
Exfoliate cheilitis	8,6±0,9	2,2±0,3	<0,001
Chronic labial fissures	6,5±0,7	-	<0,001

Thus, the most often pathology of the oral cavity mucosa in the workers engaged in the manufacture of the washing and cleaning agents seems to be allergic damages of the oral mouth and lips (44,5 %), which were observed consequently 5,7 times more often ($p<0,001$) than similar parameters in control group (7,7 %). And anamnesis showed clearly the link between occurrence of allergic stomatitis and industrial activity of the workers. The special characteristics of the mouth mucosa damages in the workers engaged in the production of the detergents is the fact that during the process of investigations there was found increased keratinization of the mucosal epithelial of the oral cavity as the manifestations of such diseases as leukoplakia (17,8 %) and exfoliate cheilitis (8,6 %), and the interrelation between a level of keratinization, duration and degree of the contact of the workers with manufacture process has been revealed. So, the most high level of keratinization was observed in workers manufactured washing and cleaning agents 5,2 times higher ($p<0,001$), than in the persons of control group.

References

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