

DISEASES OF THE ORAL CAVITY IN EMPLOYEES OF THE TEXTILE INDUSTRY WITH A WORK EXPERIENCE OF UP TO 9 YEARS IN 2 YEARS

Usmanov R. Dj.,

Nortaev A. B.,

Islamova G. R.,

Ibragimova Sh. A.

Tashkent Medical Academy Tashkent, Uzbekistan

Annotation:

The article uses various organic and inorganic paint solutions in painting - finishing enterprises in all branches of the manufacturing industry, in particular, the textile industry. These chemical dyes and solutions are a factor that calls autoallergenic reactions by denaturing proteins on the mucous membrane of the skin, respiratory tract. Clinical-experimental tests conducted by several scientists among workers of a manufacturing enterprise, in which organic and inorganic compounds were applied, comprehensively substantiated the negative effects of chemical dyes, reagents, catalysts and others on the tissues of the oral cavity and in the whole organism.

Keywords: chemical, male, female, employee, paradont.

The use of various organic and inorganic dye solutions in the manufacturing industry, as well as in paint-finishing workshops in all branches of the textile industry, is widely reported [1,2,3,4]. These chemical dyes and solutions are a factor that calls autoallergenic reactions by denaturing proteins in the mucous membrane of the skin, in the respiratory tract [9,10]. Clinical-experimental tests conducted by several scientists among workers of a manufacturing enterprise, in which organic and inorganic compounds were applied, comprehensively substantiated the negative impact of chemicals, reagents, catalysts, etc. on the tissues of the oral cavity and on the whole organism [5,6,7,8].

The purpose of the study. Study of diseases of the oral cavity in employees of the textile industry with a work experience of up to 9 years in 2 years.

Research materials and methods. Studies from 2021 to 2024, from the Workers of the “Crystal” textile combine, located on the territory of the Yangiyol District Medical Association of the Yangiyol District of the Tashkent region, we selected 575 employees. Of this, 416 (72.34%) are male employees and 159 (27.65%) are female employees. The minimum age for selected employees is 20 years, while the maximum age is 48 years or older. First of all, when studying a number of changes in the oral cavity in employees, parodont levels also paid special attention to the work process in which they actively perform.

Group 1, which is not in contact with chemical dyes (control), and group 2, which is in contact with chemical dyes (basic). In addition to periodontal disease in these employees, oral infections, tongue leukoplakia and various stomatitis are also common among them.

Results of the study: Studies have found that the percentage of periodontal disease in paint shop employees was higher in female employees than in male employees. In addition to periodontal disease, workers in paint shops also suffer from leukoplakia, stomatitis and various inflammations in the oral cavity. For example, periodontal disease was found from 165 employees (28.69%) with up to 4 years of seniority in sex (122 male employees and 43 female employees). They are between 27 and 30 years old and average 24.2 ± 2.3 years. Periodontal disease was also observed in 268 employees (46.61%) with 7-year seniority (199 men and 69 women). Their age, on the other hand, was estimated to be between 29 and 35 years old and an average of 28.4 ± 7.22 years. 142 employees (24.69%) with 9 years of work experience (95 male employees and 47 female employees) reported periodontal disease. In terms of age, however, it was between 32 and 37 years old and averaged 29.4 ± 5.8 years (diagram 1). Alternatively, among employees in contact with chemical dyes (observation group), along with periodontal disease, we can see that oral infections, tongue leukoplakia and various stomatitis are also common, as well as the appearance of cracks in the teeth, bleeding gums, moving teeth and even discoloration of the teeth.



To determine whether milk is inflamed, we used the Schiller-Pisarev (iodine Crystal, potassium iodide salt, distilled water) method. And to determine the presence of a clinical pocket, we made it through the formalin test (40% formalin, glycerin, distilled water). There are indicators of the PI in its “points”, which are defined by the standard. They are as follows: (table 1).

Table 1

Index indicators (ball)	Of Parodont's disease Degrees
0,1-1,0	Beginner and lightweight
1,5-4,0	Medial
4,0-4,8	Heavy

We also found PI in each selected employee, calculated using the formula below.

$$PI = \text{evaluation of each tooth} / \text{number of teeth}$$

According to the resulting result, the degrees of parodont disease were determined, and they are as follows.

PI-derived results (ball)

Employee seniority (years)	Employees of the compartment in the container with chemical dyes (control group)		Personnel on the contact with chemical dyes (main group)	
	Men	Women	Men	Women
4	0,06±0,068	0,08±0,187	3,0±0,156	2,2±0,133
7	0,031±0,173	0,45±0,251	3,95±0,16	3,11±0,179*
9	0,19±0,225	1,13±0,114	3,02±0,153*	4,0±0,162

Note: * - $p < 0.05$ is reliable compared to the control group

PI - induced results showed that in 71 employees who were not in contact with chemical dyes (control group), PI indicators recorded indicators below standard scores. This showed that they did not have a parodont. 504 employees in contact with chemical dyes (core group), however, were diagnosed with periodont disease and diagnosed with Pi disease levels. Among Periodontal diseases, gingivitis occurs mainly in people with less than 9 years of experience, while periodontitis occurs in workers with more than 9 years of experience (diag.1).

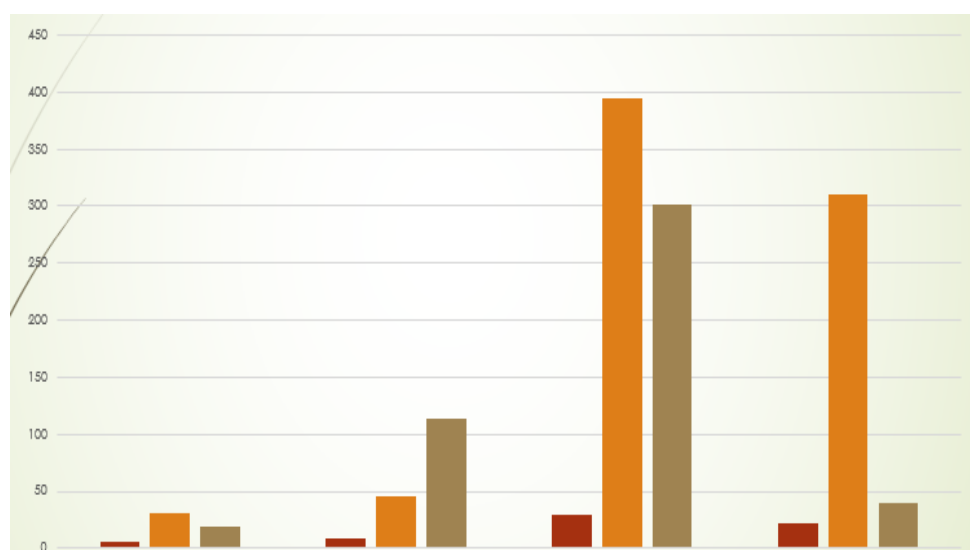


Diagramma 1

As a result of our observations, it turned out that in a certain percentage of employees there, depending on seniority, periodontal disease, its development, complications arose, that is, inflammation of the gums, swelling, fragility of teeth were also found.

Conclusion.

1. The survey showed that there was a need to develop plans that relied on novel socio-economic conditions in organizing the dental service.
2. It is also desirable to implement the shortest, fastest methods in determining the parodont.

References

1. Usmanov R.Dj., Gulmanov I.D., Nortaeв A.B. Development and prevalence of periodontal diseases in workers working with chemical paints // 100 years of the Tashkent Medical Academy – the era of great achievements and discoveries – 2022. P-244.
2. Saidov A.A. Periodontal disease and its prevention in workers of the textile industry // Monograph-2020. 134 p.

3. Volozhin A.I., Filatova E.S., Petrovich Y.A. and others. Evaluation of the state of the periodontal by the chemical composition of the environment of the oral cavity // Dentistry. -2000. №1- P. 13-16.

4. Nortaeв A.B., Rajabov B.M., Berdieв O.V. Oral inflammation in light industry workers // Texas Journal of Medical Science ISSN NO: 2770-2936. - 2023. P-84-86. <https://zienjournals.com>

5. Nortaeв A.B., Usmanov R.Dj., Nortaeва N.A. Periodontal disease and its complications in 21-30-year-old chemical paint workers // Journal of medicine and innovations ISSN 2181-1873 2023.P-215-220 www.tsdi.uz

6. Nortaeв A.B., Usmanov R.Dj., Berdieв O.V. Use of cefixime in the treatment of periodontal disease in industrial employees // Farmaecutl journal №3, 2023 P. 77-80 UDK: 616.314.18-002.4-885:615.331:323.329

7. Nortaeв A.B., Usmanov R.Dj., Ibragimova Sh.A. Severe Consequences of the Development of Periodontal Disease in the Example of Employees Working in Light Industrial Plants // Texas Journal of Medical Science ISSN NO: 2770-2936 <https://zienjournals.com> Date of Publication:06-05-2023 P- 110-113

8. Nortaeв A.B., Usmanov R.Dj., Berdieв O.V. Periodontal disease and its complications in 21-30-year-old chemical paint workers // Journal of oral medicine and craniofacial research Samarkhand - 2023. P.-21

9. Nortaeв A.B., Akhmedova S.M., Usmonov R.Dj. Periodontal disease and its development in the case of employees of chemical shops // Uzbek journal of case reports Part 3. Samarkhand - 2023. P.-130

10. Nortaeв A.B., Usmanov R.Dj., Rajabov B.M. The level of periodontal disease in 20-28-year-old textile industry workers // 77th International Scientific and Practical Conference "Achievements of Fundamental, Applied Medicine and Pharmacy". Samarkhand - 2023. P.-525.