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PARADONT INDICATORS IN EMPLOYEES WORKING WITH CHEMICAL PAINTS ILAN

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ABOUT ARTICLE

Key words: Paint, male, female, employee, paradont.**Received:** 11.10.2024**Accepted:** 16.10.2024**Published:** 21.10.2024**Abstract:** The article covers the development of the disease in workers with periodont disease who work in chemical enterprises, as well as information about employees who are in contact and who are not in contact. Also, methods for assessing the development of periodont's disease are perfectly illuminated. 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.

INTRODUCTION

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 [9,10,11]. 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 parodont indicators in employees working with chemical dyes.

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.

* Paint House department

* Laboratory Department

* Drying unit

* Finished fabric section

* Fabric coloring section In addition,

there are also sections such as bugalteria, cadres. Basically, we divided all the employees of the enterprise into two groups: 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

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.

In the course of determining whether employees of the textile enterprise "Crystal" had periodontal disease, we tried, first of all, not to undermine the work process of employees, not to undermine their performance. That is why we used the shortest methods that determine whether there is periodontal disease and at what stage it is. In doing so, we did it in conjunction with the medical officer of the enterprise. In dentistry today, there are many methods that determine the index of oral hygiene and periodontitis (periodontitis). But it is precisely in the short term in the employees of the enterprise, with ready-made laboratory preparations to determine the degree of periodontal disease, as well as at what stage:

- PI
- PMA

we used the methods.

PI - (Periodontal index) allows you to determine the presence of gingivitis and other signs of periodontal pathology: that is, the mobility of the teeth, the presence of a clinical pocket and other signs. Based on these, the periodontal level is assessed.

In this case, the periodontal condition of each tooth is assessed from 0 to 8, taking into account the degree of inflammation of the gums, the mobility of the tooth and the presence of a clinical pocket. We did it on the female and male employees in the control and main group. We also applied the tests at first on employees who are not in contact with chemical dyes (control group). Then we carried out on the staff (the main group), which will be in contact with chemical dyes.

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.

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

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

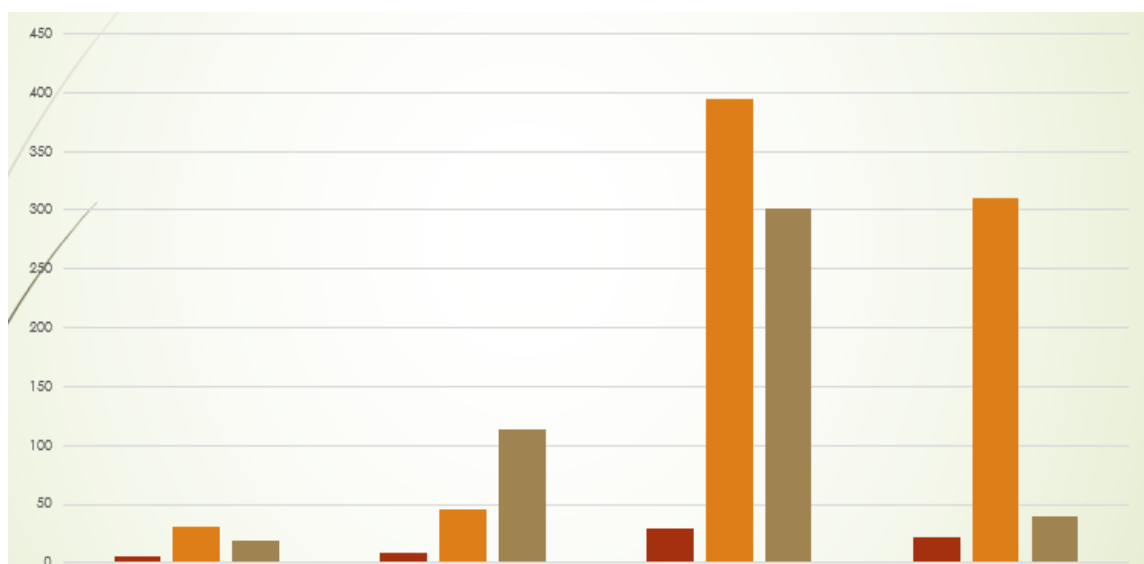
Note: * - p<0.05 is reliable compared to the control group

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.

Our observations corresponded to the information received from the medical card “primary dental examination card of employees”, which is stored in the medical officer of the enterprise, and the outpatient Card (Form №. 043), which is kept by the nurse of the New District Medical Association, as well as the nurse of the dental Polyclinic. Observation revealed that the percentage of periodontal disease also increased as working hours increased. 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



It is also worth noting that as seniority increases, the emergence, development and exacerbation of periodontal disease among employees is increasing. This was especially strongly manifested in employees who came into contact with chemical dyes. In addition to periodontal disease, paint shop workers also suffer from leukoplakia, stomatitis and various inflammations in the oral cavity. 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.

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