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Morphological Changes in Teeth in Employees with Different Seniority

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Abstract: The article presents the results of a detailed analysis of data from modern world literature on the hygienic condition of the oral cavity, the negative effects of chemical dyes on it and the increase in paradont grade,morphofunction properties of teeth. It is still justified that the structural mechanisms of the influence of chemical dyes on the development and formation of paradont levels in production enterprises are not sufficiently fully determined and it is necessary to continue scientific research on finding a solution to this problem.

Keywords: Dental, morphological indicators, employee, chemical paint.

Introduction: According to a number of authors, the composition of dyes used in dyeing - finishing enterprises in textile enterprises is mainly organic compounds. As a result of the inspections, it was determined that the textile combine is the cause of air pollution of painting - finishing enterprises, mainly aerosols of paint particles. Even tumor diseases are caused by the direct ingestion of aerosol drops of these dyes into the pathways of workers' skin, respiratory tract, and digestive organs [5,6,7,8]. The tests showed

that textile combine paint-finishing workshops pollute the air, mainly the aerosols of paint particles. One such plant is the workshops for the production of chemical dyes [1,2,3,4]. These enterprises have a wide variety of compounds that are dispersed in the air. In addition, the study of oral diseases is important in employees working there. These chemical compounds cause a variety of damage to the workers' body, especially the oral cavity and dental tissue. As a result, the clinical course of the pathological process on the mucous membrane of the oral cavity and on the hard tissues of the tooth leads to the study of its normal state [9,10,11].

The purpose of the study. Study of morphological changes in teeth in employees with different seniority.

METHODS

In order to determine the changes in the oral cavity and the levels of paradontitis, 575 employees of the "Crystal" textile combine, residing in the Yangiyol district and city of Tashkent region, as well as located on the territory of the Yangiyol district, were used. 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 and older. 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). 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

Research revealed that the percentage of paradontal 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 28.2±2.3 years. Periodontal disease was also observed in 268 employees (46.61%) with 7-year seniority (199 men and 69 women). Their age has been confirmed to be between 29 and 35 years old and an average of 30.4±7.22 years. 142 employees (24.69%) with 9 years of work experience (95 male employees and 47 female employees) reported perodontal disease. In terms of age, the age range was between 32 and 37 years, and the average was 34.8±5.8 years. The clinical method identified PI and PMA indicators for assessing the level of paradont in it, the hygienic condition of the oral cavity in employees of the Enterprise "Crystal".

The data obtained were found in the statistical section of Microsoft Excel 2010, the arithmetic mean (M), the error mean relative dimensions (M) and the coefficient of accuracy (t). Microsurates from histological preparations were photographed using an OD400 camera microscope on the sx40 model.

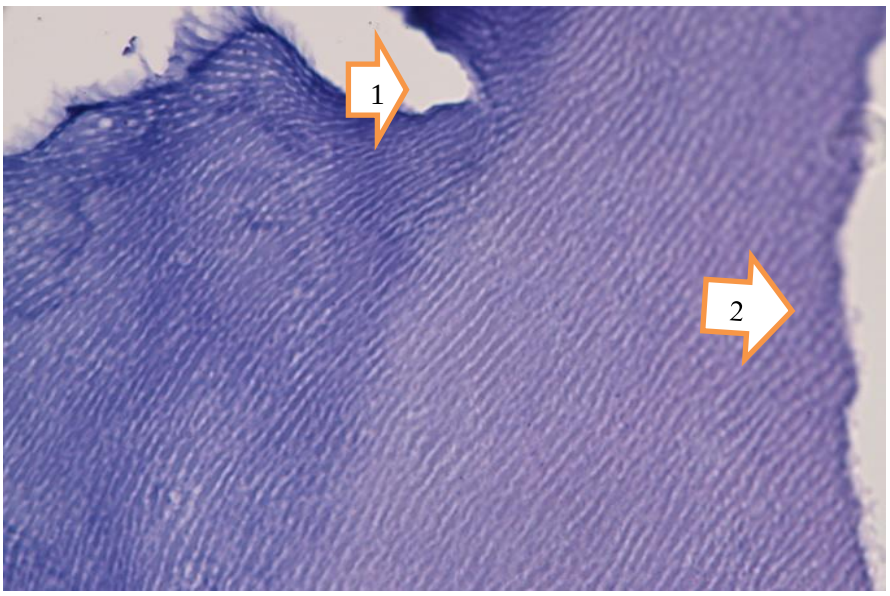


Figure 1. Histological appearance of the employee's tooth in the main group with a 7-year internship. 1-expanded foci in dental cement and small parts of the

initial cementolysis. 2-the appearance of transverse lines on the Dentin floor. Coloring: Van-Gison. X: 10x10

When the teeth of employees in contact with chemical dyes with 7 years of work experience were studied, the following were noted. On the teeth we can see the following, it was found that the integrity of the enamel cuticle was not violated (Figure 1). The Dentin tubules are flat, their lumens are not enlarged. In cement, it was determined that collagen fibers and cementocytes lie precisely between non-cellular substances. We can also see odontoblasts that remain without pathological changes. Alternatively, it was observed that Sharpey fibers were also preserved without pathological change, and that the tip of these fibers was adjacent to the radial fibers of dentin.

The following were observed when morphological parts of the teeth of employees in contact with chemical dyes with 9 years of work experience were studied. Many vacuoles have been identified in the cytoplasm of odontoblasts. An increase in the number of odontoblasts with signs of hydroponic dystrophy was observed. In some areas, swollen fluid accumulated under the odontoblast layer. Radially oriented Corf fibers as well as tangentially oriented Ebner fibers in the part of the dentin that adheres to enamel and cement, the outer zone, were also observed to be without pathological change. Alternatively, we can distinguish the closing zone again in dentin. The Dentin floor was also found to have transverse lines in combination with the fibers again. Expanded kilns and small fragments of primary cementolysis have been found in dental cement.

CONCLUSION

1. Thus, as the length of service life increased, it was found that enamel prisms contracted in the teeth of employees, demineralization was observed, significant destruction of cement due to lysis processes occurred, thus, severe dystrophic changes in the dental pulp, fluid accumulation in the pulp and among the fibers of the Corf.

2. In addition to periodontal disease, paint shop workers also suffer from leukoplakia, stomatitis and various inflammations in the oral cavity.

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