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PARADONT DISEASES AND MORPHOLOGICAL CHANGES IN TEETH IN HUMANS WORKING WITH CHEMICAL DYES

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ABSTRACT

The article covers the use of various organic and inorganic dye solutions in paint - finishing workshops in the manufacturing industry as well as in all sectors of 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 among workers of a manufacturing enterprise, in which organic and inorganic compounds were applied by several scientists, comprehensively substantiated the negative effects of chemical substances, reagents, catalysts and others on the tissues of the oral cavity and in the whole organism.

KEYWORDS

Periodontal, chemical, inflammation, group, contact, human.

INTRODUCTION

According to a number of authors, it has been found that the composition of dyes used in dyeing - finishing workshops in textile enterprises is mainly organic compounds[8,9,10,11]. As a result of the inspections, it was shown that textile combine paint - finishing workshops cause air pollution, mainly aerosols of paint particles. One of such factories is chemical dyes production shops. These shops contain various compounds, which are dispersed into the air. In addition, it is important to study the diseases of the oral cavity in the employees working there [2,4,5,6,7]. These chemical compounds cause various damage to the body of workers, especially the tissues of the oral cavity and teeth. As a result, the clinical course of the pathological process in the mucous membrane of the oral cavity and the hard tissue of the tooth leads to the study of its normal state[1,3].

The purpose of the study. Study of paradont disease and morphological changes in teeth in humans working with chemical dyes.

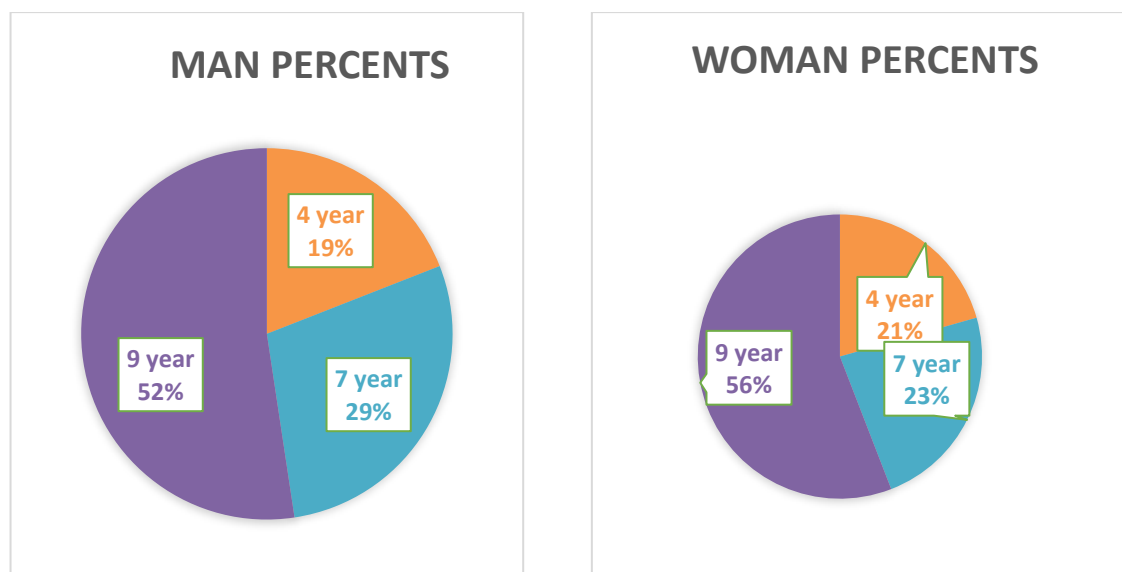
Research materials and methods. To reach the goal, we selected 90 of the workers of the textile combine, which is located on the territory of the city of Yangiyol, which is located in the city of Yangiyol. Of these, 30 are healthy and 60 are employees with periodont disease. We divide these working employees into 2 groups. Group 1 is a sound staff and forms a control group. Group 2, on the other hand, are employees with periodont disease. We divide the working staff with 60 cases of paradont into 2 more groups. Group 1 consists of staff aged 20-25, group 2 is staff aged 26-32.

We will study them for 6 months through the medical card, which is maintained by the nurse of the enterprise, as well as through the data of the city Polyclinic, and we will also study the personnel of the control group for 6 months on the basis of the medical card, which is carried out by the nurse of the enterprise, as well as the information. As a result of the inspections, it was shown that textile combine paint - finishing workshops cause air pollution, mainly aerosols of paint particles. 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.

Results of the study: As a result of the studies, it was clear that the percentage of periodontal diseases in the employees of paint shops was higher in female employees than in male employees (Diagram 2). Along with periodontal disease, workers of paint shops also suffered from leukoplakia, stomatitis, and various inflammations in the oral cavity. For example, periodontal diseases were found in 11 (20%) employees with up to 4 years of work experience in paint shops, among them (5 male employees, 6 female employees). Also, periodontal diseases were found in 14 (25%) employees with 7 years of work experience in paint shops, among them (6 men and 8 women). Of the 103 employees who were not in contact with chemical compounds, 38 are women and 65 are men. 53 out of 152 employees who come into contact with chemical compounds are female employees, and 99 are male employees. Along with periodontal disease, oral cavity infections, tongue leukoplakia, and various stomatitis were also common among them.

Diagram 2

Grouping of employees according to seniority: men and women

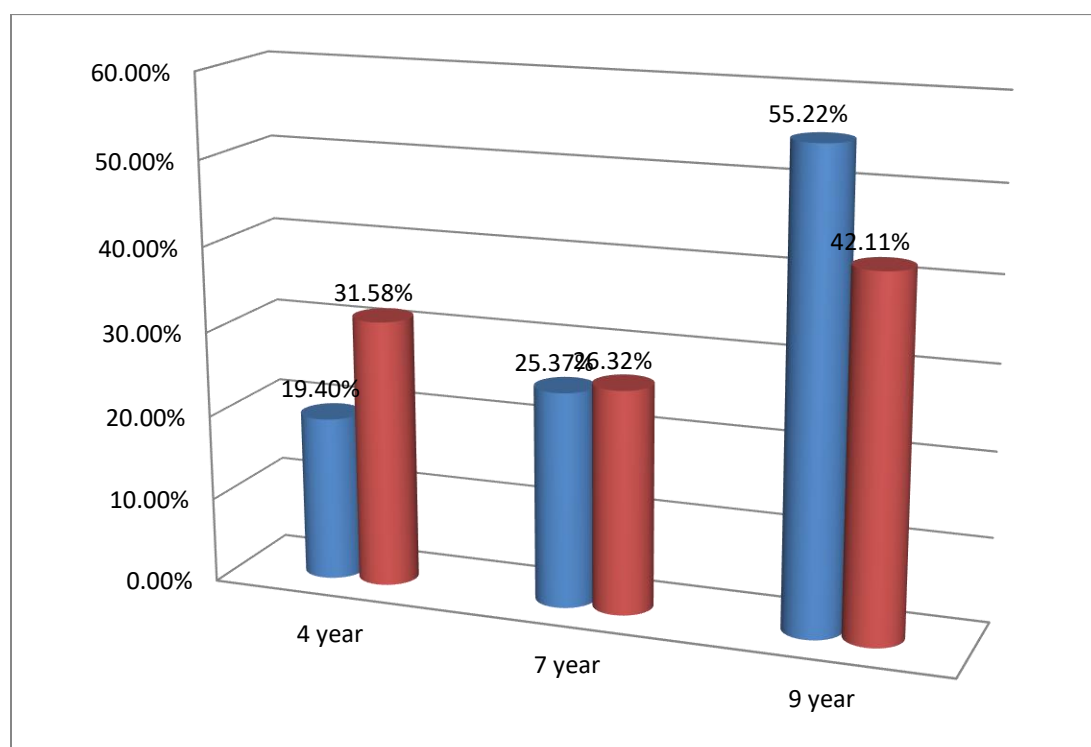


Our observations were matched with the information obtained from the medical card "Employee's primary dental examination card" kept by the nurse of the enterprise and the outpatient card (form №. 043) kept by the polyclinic nurse. As a result of the observation, it became known that as the working period increased, the percentage of periodontal diseases also increased. Among periodontal diseases, gingivitis is mainly from 10 years in people with less experience, and periodontitis in workers with more than 10 years of experience

occurs. The number of workers with periodontitis of moderate severity with increasing work experience increased. The most common disease of the mucous membrane of the oral cavity is keratosis, in the working group observed 6-10 times more than the control group. Observed among employees working with chemical paints. We can see a decrease in electrical excitation in the central teeth. Similar results were reported for molars and molars (Diagram 3). When the control groups were examined, regardless of the anatomical shape of the teeth, the same results were noted in the spade tooth and in the molar and food teeth.

Diagram 3

Calculation according to work efficiency of employees who have contact with chemical dyes and those who do not have contact



It is also worth noting that as the length of service increases, the occurrence, development and exacerbation of periodontal disease among employees increases. This was especially strongly manifested in employees who were in contact with chemical paints. Along with periodontal disease, workers of paint shops also suffered from leukoplakia, stomatitis, and various inflammations in the oral cavity. We learned the information about the medical condition of the employees working in the chemical plants from the medical card kept by the nurse working in the factories. As a result of our observations, it was found that periodontal disease, its development, and complications occurred in a certain percentage of the employees there, depending on the length of service. Also, in the oral cavity, together with periodontal disease, there were cases of leukoplakia on the tongue, as well as stomatitis, inflammation of the gums, swelling, brittleness of the teeth.

DISCUSSION

As a result of our observations, it was found that periodontal disease, its development, and complications occurred in a certain percentage of the employees there, depending on the length of service. Also, in the oral cavity, together with periodontal disease, there were cases of leukoplakia on the tongue, as well as stomatitis, inflammation of the gums, swelling, brittleness of the teeth. When the medical cards were reviewed, the circumstances of the treatment of the employees were studied. According to it, employees were divided into the following categories. That is, the employees who carried out the initial treatment and re-treatment. In addition, it was divided into groups of fully treated and partially treated employees. The incidence of periodontal disease was higher in employees with long working experience and contact with chemical dyes. This is because they breathed more chemical dyes in the air

than other workers. It was found that periodontal and various diseases of the oral cavity are found in relatively low percentages among employees who have little work experience and are not in contact with chemical dyes

CONCLUSION

1. The incidence and development of periodontal disease in workers exposed to chemical dyes was up to 6 times higher than that of workers not exposed to chemical dyes.
2. Not only periodontal disease, but also inflammation of the oral cavity, leukoplakia, and stomatitis were found in certain percentages among the employees of paint shops.
3. In conclusion, we can say that periodontal disease was relatively rare in patients who were fully treated in the hospital, and we can see that its outbreaks are decreasing.

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