



Therefore, Imosgent has high dehydration, proteolytic and antimicrobial activity related to the wound exudate due to its physicochemical composition and properties.

Preservation of the pharmacological form in the wound is achieved by the use of a dialyzer made of a semi-permeable membrane, which prevents its leaching, negative effect on reparative processes and provides an optimal drainage period of the inflammation region of MFA.

The use of Imosgent in a dialysis device provides higher efficacy for the treatment of odontogenic phlegmon by improving wound drainage compared to conventional treatment.

The use of dialyzer with polisorbents provides more powerful local dehydration effect compared to Imosgent which is crucial in the treatment of phlegmons with a predominance of exudation and improves the efficiency of the overall treatment. The use of a dialyser with Imosgent causes fast cleansing of the wound, which creates better conditions for active reparative processes in it and helps to reduce the manifestations of general intoxication.

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### **THE INFLUENCE OF PH LEVEL ON CARIES DEVELOPMENT IN CHILDREN DURING DIFFERENT AGE PERIODS**

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Caries is the most common dental disease that has been diagnosed in the world's population since ancient times. The emergence of such a pathology is due to the action of reasons that have an external and internal influence on the condition of the hard tissues of temporary and permanent teeth.

Changing the Ph of the oral fluid is one of the risk factors for dental caries. This index is the regulator of homeostasis of mineral component sand when it is shifted in the acidic direction, the mechanism that leads to the demineralization of tooth enamel is started. The physiological norm of the pH of the oral fluid is 6.60- 7.08. The decrease in the mineralizing properties of the oral fluid leads to a decrease in the acid resistance of the enamel, which causes the caries process.

The aim of our work was to study the pH, micro crystallization of the oral fluid in children aged 7-9 with and without caries and the influence of the indices on the acid resistance of enamel and the possibility of caries lesions with subsequent use of the obtained results to determine the need for preventive measures.

An examination of 134 children aged 7-9 with 1 period of mixed occlusion occurred in organized children's collectives in Poltava. The dental examination was performed according to the common used algorithm. The mineralization potential of the oral fluid was evaluated by its micro crystallization (PA Leus, 1977). Evaluation of micro crystallization was performed according to H.M. Saifulin, O.R. Pozdeev. To determine the resistance of tooth enamel to tooth decay, the enamel resistance test by Okushko V.R., Kosareva L.I. was used. The obtained results have been processed by the method of variational statistics. Indices at  $p \leq 0.05$  were considerable different.

The average oral pH of children aged 7 to 9 is  $(6.83 \pm 0.01)$  units, which is normal. The highest rate was observed in children aged 7  $(6.85 \pm 0.02)$  units, in 8 and 9-year-old children it was within  $(6.81 \pm 0.02) - (6.82 \pm 0.02)$  units. We did not find a significant difference in age metrics. Further division of children into 2 groups: with caries and without caries, revealed differences in the studied index across all ages. Children with caries are likely to have lower rates in each age group than children without caries, and their numbers are slightly acidic. In children without caries, the figure was in the range of 6.95-6.98 units, which is normal. The same tendency is observed when examining the situation with children who have only caries of temporary or permanent teeth in comparison with healthy children. That is, the average pH of children with caries is always within the range of slightly acidic, and in children without caries - slightly alkaline.

The analysis of the obtained results showed the existence of an inverse correlation in children aged 7-9 with caries between the enamel acidity index and the mineralization potential index ( $r = b-0,73$  - strong index) and pH ( $r = b-0,66$  - inverted significant) of oral fluid. A direct



strong relationship was also found between the pH and the mineralization potential of the oral fluid ( $r = 0.79$ ) in these children.

Therefore, the course of caries in children aged 7-9 is against the background of a decrease indices of pH and micro crystallization of the oral fluid and is caused by a decrease in the resistance of teeth to caries, as evidenced by the results of the study of the enamel acid resistance according to the enamel resistance test. The data obtained prompt the need for primary and secondary prevention aimed at improving oral homeostasis indices, which will reduce the prevalence and intensity of caries in children.

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## **DENTAL STATUS OF PREGNANT WOMEN IN DIFFERENT TRIMESTER OF PREGNANCY**

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During pregnancy, a functional restructuring of all organs and systems occurs in a woman's body. During this period, adaptative changes occur in the nervous, endocrine, cardiovascular and other systems of the body and also in the oral cavity. Despite the fact that preventive methods and remedies are widely used in dental practice, the prevalence of dental diseases in pregnant women remains high. Studies of many authors show that pregnancy increases the risk of new dental diseases or exacerbation of existing diseases, especially lesions of hard dental tissues and periodontal tissues. According to WHO, the prevalence of dental caries among pregnant women is 2.9 times more frequent than among women that are not pregnant and the inflammatory process of periodontal tissues is 2.2 times more frequent in pregnant women.

The aim is to study the dental status in different trimesters of pregnancy.

The investigation involved 75 pregnant women living in the territory of Bukovina. They had a triple examination: 1st trimester (5-13 weeks), 2nd trimester (17-26 weeks), 3rd trimester (30-36 weeks). The examination was performed according to the conventional method. The hygiene index, the intensity of caries and the condition of periodontal tissues were determined.

Local demineralization of enamel (caries in the spot stage) at the initial examination was found in 52.0 % of the examined. During the observation period, indicators increased to 53.3 % in the second trimester and 56.0 % in the third trimester. Caries intensity according to DMF index: 1st trimester - ( $11,34 \pm 0,11$ ), in 2nd trimester - ( $11,55 \pm 0,12$ ), and in 3rd trimester - ( $11,98 \pm 0,83$ ). Based on the study of caries increasing, we also observed the highest caries activity in the third trimester in women with the second pregnancy, and in the second trimester in women with the first pregnancy.

By the way the acute carious process of intact teeth is observed in 38,0 % of cases. Secondary caries occurs in 79.0 % of women, with an intensity of growth of 0.83 of a tooth. The carious lesions that were present before the pregnancy have a chronic course. The intensity of caries increases at the beginning of the second trimester.

During pregnancy, the prevalence of periodontal tissue inflammation ranges from 36 to 100 %, chronic catarrhal gingivitis is observed in 90.0 % of cases. Pregnancy gingivitis is observed in 50.0 % of women with physiological pregnancy. Condition of periodontal tissues: in the first trimester, 60.0 % of pregnant women have chronic localized mild catarrhal gingivitis, starting with the second half of pregnancy in 43.0 % of women gingivitis occurs as a generalized, diffuse process with a predominance of hypertrophic process in 26.0 % of cases, in the 3rd trimester - 21.3 % have exacerbation of chronic generalized catarrhal gingivitis of mild severity.

Thus, during pregnancy, there is a significant increase in all indicators, especially in the third trimester of pregnancy. It proves the dependence of the dental status of pregnant women on the duration and nature of pregnancy, the number of previous pregnancies, and the presence of chronic diseases. The high prevalence of caries and its complications, and also inflammatory diseases of periodontal tissues, once again demonstrates the need for the introduction of mandatory