MODERN MEDICINE AND PRACTICE
https://inovatus.es/index.php/ejmmp
EUROPEAN JOURNAL OF MODERNMEDICINEAND PRACTICE
Vol. 4 No. 5 (May - 2024) EJMMP ISSN: 2795-921X

ORAL HEALTH OF WOMEN AT DIFFERENT STAGES OF PREGNANCY

Sodiqova Shoira Amriddinovna
Scientific leader. Assistant, Department of therapeutic Dentistry of Samarkand State Medical University

Maxmatmurodov Shaxzod
Department of therapeutic Dentistry of Samarkand State Medical University student of group 516

Raximov Rizamat
Department of therapeutic Dentistry of Samarkand State Medical University student of group 516

Raxmonov O'tkir
Department of therapeutic Dentistry of Samarkand State Medical University student of group 516

Abstract: Pregnancy is a dynamic condition leading to many generalized changes in a woman's body due to progressive hormonal influences. Increased hormonal changes can lead to various signs and symptoms that can change a person's overall health and perception. Cause systemic changes, including the cardiovascular, hematological, respiratory, renal, gastrointestinal, endocrine and genitourinary systems. Like any other system, the oral cavity undergoes a number of changes during pregnancy and therefore requires special attention from dentists. The changes in the mouth observed during pregnancy have been studied for many years, but their extent and frequency have not been emphasized. This study was undertaken to evaluate the prevalence of oral lesions in different trimesters of pregnancy and their correlation with changes in saliva.

Key words: Pregnancy, dental health, oral hygiene, trimesters of pregnancy, age groups.

INTRODUCTION

Pathological processes in the organs and tissues of the oral cavity are one of the pressing problems of modern dentistry. At the same time, special attention is devoted to studying their condition during changes in functioning of organs and systems of the body, as well as influence on the functioning of the dental system climatic and geographical features.

Pregnancy is a special state of a woman's body in which a new life. However, despite the miraculous transformation, the expectant mother's body experiences significant changes that do not always improve her health. During pregnancy, hormonal changes occur in the body, which impairs blood supply and weakens the immune system. In the saliva of the future mothers, the concentration of calcium and phosphorus decreases, which makes tooth enamel more vulnerable and accessible to caries development. Increased appetite during pregnancy leads to increased consumption of carbohydrates, which are a favorable environment for the development of bacteria. About 50 million microorganisms simultaneously live in the oral cavity of each person. In addition, toxicosis accompanied by vomiting in the first trimester

of pregnancy, disrupts the acid-base balance in the oral cavity, which also contributes to increased proliferation of microbes. As a result of all these changes, expectant mothers, caries development occurs twice as fast, more often Bleeding gums occur and gingivitis appears - the scourge of almost all pregnant women. Among women, who are expecting a child, awareness of the importance of dental status and oral health is very important role for both the expectant mother and the child.

There is an opinion that the processes occurring in the oral cavity do not in any way affect the health of the unborn baby, and visiting the dentist during this period can harm the child. Others, although aware of the importance of dental health, are dishonest when it comes to oral care. Lack of cavity sanitation creates a source of infection in the body of a pregnant woman, which can lead to various diseases and their complications. It also poses a threat to normal development, gestation of the fetus and its future health. In connection with the above, it is relevant to identify the most likely dental pathology in women who are pregnant. The purpose of the study is to develop a set of measures for dental support for pregnant women based on clinical and social research methods. The goal is decomposed into the following tasks:

1. Determine the level of oral hygiene in women in different trimesters of pregnancy.
2. Identify the correlation between the intensity of the carious process and the depth of inflammation in marginal periodontium depending on pregnancy and age respondents.

Materials and methods

The scientific research work was carried out with the informed consent of the patients and in accordance with the ethical standards of the Declaration of Helsinki (2000). The study was conducted in a, antenatal clinic at the KGBI “Maternity Hospital No. 2” in Khabarovsk. In order to identify the compliance of pregnant women A questionnaire was conducted in daily oral care. The group was ranked by age and duration of pregnancy (trimesters). The average age of respondents was 30 (18÷38) years, with 6 (12%) people were in the first trimester of pregnancy, 16 (32%) women were in the second trimester of pregnancy, 28 (56%) pregnant women were at least 6 months pregnant up to 9 months.

The dental status of pregnant women was assessed based on the determination of the intensity of the carious process according to the CPI index, the hygienic condition using the J.C. Green and J.R. Vermillion index. The study of the condition of periodontal tissues was carried out according to the index of quantitative determination of the intensity and prevalence of inflammation in the marginal periodontium (PMA Parma). The need for treatment of periodontal tissue diseases was assessed by the CPITN method. Due to the uneven distribution of groups, data processing was carried out using nonparametric criteria for ranking: medians and percentiles. The Mann-Whitney criterion and the Kruskal-Wallis multiple comparative criterion were used for intergroup comparison.

Results and discussion

The study revealed that motivation for visiting a dentist, 42 (84%) pregnant women were interested in maintaining their own health and the health of their unborn child, 8 people (16%) were concerned about the preservation of the dental system itself, 8 women (16%) sought dental care to combat bleeding gums. The priority for the majority, namely 38 (76%) of those surveyed, was the use a medium-hard toothbrush.

When determining the hygienic state of the oral cavity, the group was divided by age: pregnant women women under 30 years of age and after 30 years of age. It was found, that 26 pregnant women take good

care of their cavity mouth, 20 of them were under 30 years of age and 6 after the 30-year mark. Satisfactory level oral hygiene also prevailed in the group of people up to 30 years old. An unsatisfactory level of oral hygiene was noted in 6 pregnant women under 30 years of age and 5 pregnant women after 30 years. Usage The Mann-Whitney U test showed a significant difference indicators of good, satisfactory and unsatisfactory levels of hygiene in both age groups groups ($p<0.01$). Poor level of oral hygiene mouth was not identified among pregnant women.

In pregnant women over 30 years of age, it was more often observed a picture of weakened motivated oral care, which was revealed in deteriorating hygiene. A compensated form of caries was identified in 18 pregnant women, of which 16 women were in the age group under 30 years of age, and 2 pregnant women were over 30 years of age. A subcompensated form of caries was identified in 11 pregnant women; it prevailed in older people. group under 30 years old (7 people and 4 people, respectively). Using the Mann-Whitney U test showed a significant difference in the indicators of compensated and subcompensated forms of caries in both age groups ($p<0.01$). Most noted decompensated form of caries in 21 pregnant women women, of which 12 were in the age group before 30 years of age, and 9 were in the group after 30 years of age. Using the Mann-Whitney U test showed an insignificant difference in the indicators of the decompensated form caries in both age groups ($p>0.05$).

Thus, in women over 30 years of age, the decompensated form of caries predominates; the group under 30 years old has a compensated form of caries. When examining the condition of periodontal tissues, in in the group studied up to 30 years of age, slight damage to the marginal gums was observed, corresponding to mild to moderate severity. Future mothers who crossed the 30-year mark were dominated by a severe degree of periodontal disease. Using the Mann-Whitney U test showed insignificant difference in indicators of mild, moderate and severe degrees of gingivitis in both age groups ($p>0.05$). To one degree or another, gingivitis occurs in everyone pregnant women.

When assessing the relationship between gestational age and the severity of inflammatory reactions in periodontal tissues using the Kruskal-Wallis test found that the brightness of the clinical picture and severity pathological changes in the tissues surrounding the tooth, in pregnant women did not depend on the trimester of pregnancy. ($p>0.05$, H-criterion=2.44). When assessing the, relationship the influence of the trimester of pregnancy on the level of oral hygiene using the Kruskal-Wallis criterion, it was found that the level of oral hygiene in pregnant women depended on the trimester of pregnancy ($p <0.05$, H-criterion = 8.76). With increasing period During pregnancy, oral hygiene deteriorated.

When studying the relationship between the level of oral hygiene and the degree of preservation of periodontal tissues, it was found that pregnant women in different trimesters have a high correlation ($R = 0.91$), the worse the hygienic oral care was, the more pronounced the inflammatory phenomena in periodontal tissues.

Conclusions.

In our study, in pregnant women the level gingivitis and periodontitis was higher than in non-pregnant women. Between all groups in this study there were statistically significant differences, with the exception of the control groups and first trimester groups. Gingivitis and periodontitis, observed during pregnancy are the result insufficient oral care in pregnant women. Exposure to certain hormones during pregnancy can predispose pregnant women to gum inflammation and periodontitis. For example, progesterone is known to lead to the development of localized inflammation. Periodontitis is more common in pregnant women than

in non-pregnant women, and most often in the third trimester. In the third trimester, periodontal disease worsened with a decrease in saliva pH. Along with the increase in OHI-S indicators, there was a progressive increase in CPI indicators in all groups. During pregnancy, the gums lose their resistance to inflammatory changes due to local irritants (bacteria and plaque). It was found that with an increase in local irritants and due to poor oral hygiene, the incidence of gingivitis and periodontal destruction increased in all study groups. Additional factors affecting the condition of the oral cavity organs are: the effect of hormones on the vascular networks of the gums; subgingival stones; specific periodontal cells; and the local immune system during pregnancy. It was found that the condition of the oral cavity worsened during pregnancy, and this is worst in the third trimester, as evidenced by an increase in the prevalence of lesions of the oral mucosa oral cavity, dental caries, gingivitis and periodontitis, as well as a decrease in the hygienic status of the oral cavity in the third group trimester. It has also been found that the pH of saliva decreases during pregnancy, with pregnant women's saliva becoming more acidic as pregnancy progresses from the first to the third trimester. Compared to non-pregnant women. During the study, it was found that the pH of saliva correlates with the prevalence of oral lesions in different trimesters of pregnancy, so the pH of saliva can be used to assess the prevalence of oral lesions in different trimesters of pregnancy.

References:

1. Grokholsky A.P. Calculus: its influence on teeth, periodontal tissues and the organism // Health. – 2000. – 160 p.
2. Doroshina V.Yu. Prevention of dental diseases in pregnant women as a basis for dental health in early childhood: Thesis of a … Candidate of medical sciences. – Moscow Medical Stomatological Institute. – 1997. – P. 1-30.
3. Zharkova O.A. Prevention of dental diseases during pregnancy // Bulletin of Vitebsk State Medical University. – 2008. – P. 94-101.
4. Kuzmina E.M. Prevention of dental diseases // Tonga-Print. – 2001. – P. 153-189.
5. Nosova V.F., Rabinovich S.A. Features of dental care for pregnant and lactating women // Clinical stomatology. – 2010. – № 3. – P. 46-49.
6. Oskolsky G.I., Nepomnyashchikh.L.M., Yurkevich A.V., Lushnikova E.L., Yurkevich N.V. Interaction of pathological manifestations in the oral mucosa and gastrointestinal tract diseases // Far Eastern Medical Journal. – 2010. – № 3. – P. 130-133.
7. Oskolsky G.I., Nepomnyashchikh. L.M. Yurkevich A.V., Lushnikova E.L., Yurkevich N.V. The study of structural and proliferative processes in the gingival epithelium associated with changes in the parodontium status // Yakutsk Medical Journal. – 2011. – № 4. – P. 92-94.
8. Oskolsky G.I., Ushnitsky I.D., Zagorodnyaya E.B., Yurkevich A.V., Mashina N.M., Baisheva V.I. Stomatological status of the population of the Far East // Endodontics Today. – 2012. – № 3. – P. 10-14.
9. Amriddinovna, S. S., Dilshod, B., & Mirabbos, M. (2024). MECHANICAL, PHYSICAL AND CHEMICAL DAMAGE TO THE MUCOUS MEMBRANE OF THE ORAL CAVITY, CLINIC, DIAGNOSIS, TREATMENT AND PREVENTION. *European Journal of Interdisciplinary Research and Development*, *24*, 203-206.

10. Amriddinovna, S. S., Shoxrux, M., Amir, N., & Javlonbek, N. (2024). Determination Of Hematological Parameters (Hemogram and Leukogram) In Blood Serum in Women with Generalized Periodontitis, Whose Pregnancy Is Complicated by Iron Deficiency Anemia. *Diversity Research: Journal of Analysis and Trends*, *2*(1), 1-4.
11. Shoira, S., Shaxboz, S., Akmal, R., & Anvar, R. (2023). DIFFERENTIAL DIAGNOSIS OF PERIODONTITIS IN PREGNANT WOMEN WITH IRON DEFICIENCY ANEMIA. *Journal of Academic Research and Trends in Educational Sciences*, *2*(3), 221-225.
12. Amriddinova, S. S., Asror, K., Khumoyun, M., Sobirjon, A., & Oybek, B. (2022). THE ROLE OF DENTISTRY IN THE STUDY OF THE ORAL CAVITY AND MAXILLOFACIAL AREA. *Web of Scientist: International Scientific Research Journal*, *3*(10), 1299-1303.
13. Sodikova Shoira Amriddinovna, Nasriddinov Fazliddin, Topilova Surayyo, & Tuxtamisheva Noila. (2024). CHEILITIS (INDEPENDENT AND SYMPTOMATIC), GLOSSITES, ETIOLOGICAL FACTORS, PATHOGENESIS, CLINIC, COMPARATIVE DIAGNOSIS TREATMENT. *Academia Repository*, *5*(3), 94–99. Retrieved from https://academiarepo.org/index.php/1/article/view/602
14. Sodikova Shoira Amriddinovna, Urazov Anvar, & Baratov Maruf. (2024). LIGHT TREATMENT TREATMENT WITH WATER HEAT PARAFFIN THERAPY IN DISEASES OF THE MAXILLOFACIAL AREA. *Academia Repository*, *5*(02), 98–101.
Retrieved from https://academiarepo.org/index.php/1/article/view/525
15. Sodiqova Shoira Amriddinovna, Abdurazzoqov Kamoliddin, Abrorov Yunusxon, & Isomova Maftuna. (2023). MANIFESTATION OF CANDIDIASIS IN ORAL CAVITY. *Galaxy International Interdisciplinary Research Journal*, *11*(9), 292–295.
Retrieved from https://giirj.com/index.php/giirj/article/view/5574
16. Sodikova Shoira Amriddinova, Kholmurodov Jahangir, Ziyadullayev Khondamir, & Abdumurodov Nurbek. (2022). THE IMPORTANCE OF A HEALTHY MOUTH IN HUMAN HEALTH. *World Bulletin of Public Health*, *15*, 233-236.
Retrieved from https://www.scholarexpress.net/index.php/wbph/article/view/1589
17. Камилов, Х. Зойиров, Т. Содикова, Ш. Абсаламова, Н. & Каххарова, Д. (2017). Клиническая оценка и повышение качества прилегания пломб при различных условиях лечения кариеса зубов. *Stomatologiya*, *1*(1 (66)), 10-12.