

THE EFFICIENCY OF COMPLEX THERAPY IN THE TREATMENT OF INCREASED SENSITIVITY OF HARD TISSUES TEETH IN POSTPARTUM WOMEN

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Abstract: hyperesthesia of hard tissues of the teeth (HHTT) is a frequently occurring complaint of patients, which, as a rule, leads them to an appointment with a dentist. Most often, hyperesthesia manifests itself as a sharp or moderate pain when exposed to various factors: chemical (sour foods), thermal (most often it is cold water, ice cream, a sharp change in cold drinks or food to warm) and mechanical (toothbrush, toothpick).

Pregnant women belong to a group with a high risk of dental diseases, which is caused by changes in hormonal levels, mineral metabolism, saliva pH, acid-base balance, toxicosis, vitamin D deficiency and insufficiency during pregnancy and after childbirth.

Keywords: hyperesthesia, hard, tooth tissues, women, postpartum period, remineralizing therapy, calcium carbonate.

ЭФФЕКТИВНОСТЬ КОМПЛЕКСНОЙ ТЕРАПИИ В ЛЕЧЕНИИ ПОВЫШЕННОЙ ЧУВСТВИТЕЛЬНОСТИ ТВЁРДЫХ ТКАНЕЙ ЗУБОВ У ЖЕНЩИН В ПОСЛЕРОДОВОМ ПЕРИОДЕ

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Аннотация: гиперестезия твердых тканей зубов (ГТТЗ) – часто возникающая жалоба пациентов, которая, как правило, приводит их на приём к врачу-стоматологу. Чаще всего гиперестезия проявляется как резкая или умеренная болезненность при воздействии различных факторов: химические (кислые продукты), термические (чаще всего это – холодная вода, мороженое, резкая смена холодных напитков или пищи на теплое) и механических (зубная щетка, зубочистка).

Беременные женщины относятся к группе с высоким показателем риска возникновения стоматологических заболеваний, что обусловлено изменением гормонального фона, минерального обмена, pH слюны, кислотно-щелочного баланса, проявлением токсикоза, дефицитом и недостаточностью витамина D во время беременности и после родов.

Ключевые слова: гиперестезия, твердые, ткани зуба, женщины, послеродовой период, реминерализующая терапия, кальция карбонат.

Tooth sensitivity in response to chemical, thermal or mechanical stimuli occurs in 60-75% of adults, among which women make up the main group [1, 4].

One of the main reasons for the development of hyperesthesia of the teeth in most women is pregnancy and pregnancy-related factors in the development of HHTT [2, 5]. To select the correct tactics for the complex treatment of hyperesthesia of the teeth in women in the postpartum period, it is necessary to study the processes occurring in the woman's body during pregnancy and after it [3, 4, 6].

The purpose of the study: to study the manifestation of HHTT in women in the postpartum period, as well as to study the effectiveness of the use of several methods of treatment individually and as part of complex therapy for the treatment of HHTT.

Material and methods. To assess the effectiveness of the use of various methods individually and in combination, a study was conducted of 60 puerperas, divided into 4 groups. The women's age ranged from 20 to 35 years. In each group, 15 people were studied for 6 months. The parturient women included in the 1st group led their usual way of life, but brushed their teeth daily with ApadentTotalCare toothpaste with medical nanohydroxyapatite (twice a day, using the Bass brushing technique and, if indicated, approximal brushes and flosses). ApadentTotalCare toothpaste contains cetylpyridine chloride, which inhibits the maturation of the biofilm, triterpene acid, which has anti-inflammatory and antioxidant effects, and beta-glycyrrhizic acid. To determine the sensitivity

of the teeth, the Schiff index was used, based on the detection of the sensitivity threshold of the tooth using an air jet: air from the gun of the dental unit was supplied perpendicular to the cervical surface of the tooth at a distance of 1 cm for a second at a temperature of 21°C. Tooth sensitivity was assessed using the following criteria: 0 - no response; 1 - a feeling of discomfort, but the patient does not insist on stopping the test; 2 - discomfort, accompanied by a request to stop the test; 3 - a pronounced pain reaction with motor reactions aimed at the immediate termination of the test.

In the 2nd group of patients, remineralizing therapy was carried out using a water-based paste "GC ToothMousse". Its active component is the Recaldent™ complex (CPP-ACP: casein phosphopeptide - amorphous calcium phosphate). Casein phosphopeptide is produced from cow's milk casein, retains calcium and phosphate ions in a soluble form. Being very sticky, it binds to enamel, pellicle, dental plaque, soft tissue, bacteria surface. Amorphous calcium phosphate contains a very high content of free calcium and phosphate ions (ordinary calcium phosphate is insoluble and is in a crystalline state at neutral pH). In the oral cavity, CPP-ACP exhibits adhesive properties in relation to the epithelium, components of dental plaque, pellicle and enamel, where it forms multiple depots of bioavailable calcium phosphate. Free calcium and phosphate are delivered directly to the destination. Calcium and phosphate ions are released from the CPP, penetrate the enamel and regenerate the apatite crystals. Pleasant taste stimulates salivation and enhances the effectiveness of the drug. Paste applications were carried out in a clinical setting according to the manufacturer's instructions for 3 minutes. Patients were advised to refrain from eating for 30 minutes. Each patient was instructed on the use of this drug at home. The drug was applied 2 times a day with a dry finger or applicator after brushing the teeth for 5 minutes. For better penetration of the drug into the interproximal spaces, it was recommended to use a floss. During the procedure, it was not recommended to spit and swallow saliva. Additional rinsing of the oral cavity was not required. During the next 30 minutes, it was not recommended to drink and eat. Control examinations of patients were carried out at the beginning of the study (initial examination) and during the period of use of the remineralizing drug - after 1 and 2 weeks. The obtained data were entered into a special survey card.

Group 3 included patients who took 900 IU of cholecalciferol and 1000 mg of calcium carbonate for 6 months after delivery. Comparative analysis was carried out on the basis of a survey of patients before and after therapy.

In the 4th group of puerperas, remineralizing therapy was carried out using a water-based paste "GC ToothMousse". Daily use of ApadentTotalCare with medical nanohydroxyapatite and 900 IU of cholecalciferol and 1000 mg of calcium carbonate for 6 months were recommended.

Results and discussion. In the treatment of HHTT by four different methods, the following results were obtained. When using ApadentTotalCare toothpaste with medical nanohydroxyapatite for 6 months, it was possible to significantly reduce tooth sensitivity, which resulted in a decrease in complaints: in 9 patients (60%), complaints decreased, and in 6 the symptoms completely disappeared. In the 2nd group, when treating them with GC ToothMousse water-based remineralizing paste, patients noted a pleasant taste and smell, convenience and comfort in using this paste. After its use for a long time there is a feeling of freshness of breath. During the study period, according to the control dental examinations, there were no cases of locally irritating and allergenic effects of the paste on the oral mucosa. So, the regular use of the remineralizing drug contributed to the fact that in 13 patients (87%) complaints of tooth sensitivity decreased, and in 2 (13%) the symptoms completely disappeared. In the 3rd group, where patients took daily 900 IU of cholecalciferol and 1000 mg of calcium carbonate for 6 months, complaints of hypersensitivity decreased in 10 (66%) patients, and in 5 (33%) the symptoms completely disappeared. With the complex application of 3 methods of treatment of HHTT, a decrease in signs of sensitivity was found in 3 (20%) patients and the complete disappearance of signs of sensitivity in 12 (80%) patients.

Thus, as a result of our study, it was found that the treatment of HHTT can be carried out in different ways and methods separately. It should be emphasized that the complex application of several methods leads to satisfactory long-term results in parturient women, despite the ongoing loss of minerals and vitamins during breastfeeding in the postpartum period.

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