DYNAMICS OF CHANGE OF INDICATORS OF FIRMNESS OF CAPILLARIES OF THE MUCOUS MEMBRANE OF THE PROSTHETIC BED AT PATIENTS WITH DIABETES

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Abstract: the author considers the complications arising in this pathology. The article analyzes technique of prophylaxis and treatment of prosthetic stomatitis in patients with diabetes mellitus is analyzed. To obtain accurate results on the state of the mucous membrane of the oral cavity, a chemical diagnostic method was used. It was found that the use of the drug strengthening the vessel wall in individuals who have reduced permeability of the vascular wall and a violation of the capillary strength, has a tonic effect on the vessels, restores the vasculature of the mucosa of the prosthetic bed already on the 7th day.

Keywords: durability of capillaries, prosthetic stomatitis, diabetes mellitus, vascular strengthening.

ДИНАМИКА ИЗМЕНЕНИЯ ПОКАЗАТЕЛЕЙ СТОЙКОСТИ КАПИЛЛЯРОВ СЛИЗИСТОЙ ОБОЛОЧКИ ПРОТЕЗНОГО ЛОЖА У БОЛЬНЫХ САХАРНЫМ ЛИАБЕТОМ

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Аннотация: автором рассмотрены осложнения, возникающие при данной патологии. В статье анализируется дифференцированная методика профилактики и лечения протезных стоматитов у больных сахарным диабетом. Для получения точных результатов о состоянии слизистой оболочки полости рта был использован химический метод диагностики. Выявлено, что применение препарата, укрепляющего сосудистую стенку у лиц, имеющих сниженную проницаемость сосудистой стенки и нарушение стойкости капилляров, оказывает тонизирующее действие на сосуды, восстанавливает сосудистую сеть слизистой оболочки протезного ложа уже на 7-е сутки.

Ключевые слова: выносливость капилляров, протезный стоматит, сахарный диабет, укрепление капилляров.

Despiteconsiderable progress indevelopment of orthopedic stomatology and constant improvement of methods of rendering the orthopedic help to the population, the problem of treatment of defects of tooth alignments still remains relevant [1, p. 14; 2, p. 12].

Results of researches of many authors [3 ,p. 127; 4, p. 9] demonstrate that 40–60% of persons are more senior than 40 years have defects of tooth alignments and need treatment by means of various designs of dentures (the bugel, partial the plate, full removable). Considerable need of the population for this type of prosthetics is defined also by the fact that treatment of defects of tooth alignments removable dentures has to be carried out regularly at an interval of average each 3–4 years.

Due to the increase in life expectancy of the population the need for treatment of defects of tooth alignments at elderly people has considerably increased, many of which have diabetes [4, p. 11; 5, p. 407].

It is known what is kind of qualitative the removable denture has been made, it is a foreign matter in an oral cavity. Therefore the special relevance is acquired by questions of adaptation to removable designs of dentures in general and, in particular, at patients with diabetes. Improvement of processes of adaptation to removable designs of dentures at patients with diabetes — one of especially important and extremely current problems of orthopedic stomatology [6, p. 42].

Developing of prosthetic stomatitises as numerous researches testify, remains mult-pathogenetic process, the leading role in which belongs to residual monomer and a trauma basis of an artificial limb [7, p. 55]. However

when using the artificial limbs made of nylon, polypropylene or acetalthe complications similar in the clinical picture to the prosthetic stomatitises arising at carriers of acrylic artificial limbs are noted (the truth, is much more rare). The similar situation is observed also at application of artificial limbs with soft laying. Therefore, in an etiology of prosthetic stomatitises the significant role is played also by other factors. Especially it is relevant for the patients having somatic diseases. Considering data of the review of literature, for studying of an etiology of prosthetic stomatitises we have in addition allocated three factors: mycologic, vascular and plastic.

Proceeding from told, we have set a goal — to develop the differentiated technique of prevention and treatment of prosthetic stomatitises at patients with diabetes.

Materials and methods of a research. In work we investigated 54 patients with diabetes, persons in need in prosthetics with partial removable artificial limbs.

Kulazhenko's test was reproduced as follows. After creation in the system of depression in 720–740 mm Hg. (with a residual pressure of 20-40 mm Hg.) the sterile tip was put to a gum and connected a cavity of a tip (tube) to system then the tip stuck to a gum. Through a transparent wall of a vacuum tube watched how the gum is pulled in in a tube, its color changes, there are separate hemorrhages which rather quickly merge, forming a vacuum hematoma. Time during which there were hematomas characterized firmness of capillaries of a gum.

Statistical processing of material was carried out by means of a package of the statistical Statistica 6,0 programs (Stat Soft). At normal distribution of ranks of difference between groups revealed by means of Student's criterion.

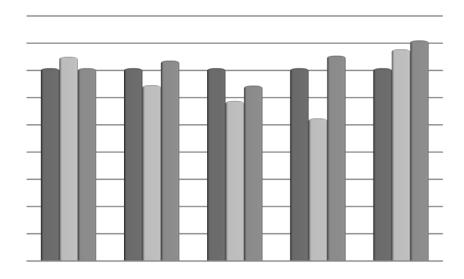
Results of researches and their discussion. As is well-known from literature, at diabetes there is a permanent violation of a structure of normal capillary network. It is rather actively shown in vascular network of a prosthetic bed – a mucous membrane of an oral cavity as show our developments.

One of the objective tests characterizing firmness of a capillary wall is V.I. Kulazhenko's technique. When conducting this test we have found out in the patients needing prosthetics by partial artificial limbs that rather most part of patients in selection has more struck vascular wall of a mucous membrane of an oral cavity, than somatic healthy faces.

We have selected the persons having the most expressed pathology of the capillary course and have divided them into three groups depending on a type of dental treatment: the 1st group - the patient held no additional events; the 2nd group - Askorutin's application on 1 tablet 3 times a day.

Results of observations of these groups of patients are presented in fig. 1. The obtained data prove that without treatment (group 1) the firmness of capillaries when carrying artificial limbs decreased by 25,1% - with $(35,4\pm0,38)$ to $(26,2\pm0,402)$ with for the 14th days of observations. Further the firmness of capillaries, thanks to protective forces of an organism, slightly increases that, in our opinion, is connected with adaptation to an artificial limb, and to the term of 1 month is $(38,9\pm0,29)$ pages.

Constant application the routine in the form of the medicine "Askorutin" (group 2) increases firmness of capillaries of a mucous membrane of a prosthetic bed for 9.9% - with $(35,4\pm0,38)$ to $(40,5\pm0,27)$ with for the 30th days.



■ before treatment ■ 1 group ■ 2 group

Fig. 1. Change of indicators of firmness of capillaries of a mucous membrane of a prosthetic bed at patients with diabetes

Therefore, use of medicine strengthening a vascular wall at the persons having the reduced permeability of a vascular wall and violation of firmness of capillaries has the toning effect on vessels, restores vascular network of a mucous membrane of a prosthetic bed for the 7th days.

The specified method of therapy and prevention of prosthetic stomatitis allows to reduce considerably quantity of complications of prosthetics at patients with diabetes.

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