

## Assessment of the Dental Condition of Patients with Impaired Cerebral Circulation

Muratova Saodat Kadirovna Shukurova Nodira Tillayevna Samarkand State Medical University, Samarkand, Uzbekistan Samarkand State Medical University, Samarkand, Uzbekistan

BSTRACT

In our studies, the relationship between pathogenetic and functional disorders of cerebral ischemia and the functional state of the oral mucosa was revealed. The use of a comprehensive diagnostic and preventive approach was justified, taking into account the presence of cerebral circulation disorders in the disease of the SOPR in the practice of a dentist. Pathogenetic justified sequence of application of preventive methods that make up the complex - dynamic monitoring of patients in order to determine the effectiveness of the treatment used and the need for repetition of the course of treatment.

**Keywords:** 

oral mucosa, periodontal disease, chronic cerebral ischemia, pathological pocket, hygienic index.

Introduction: Today in the world there are many scientific studies dedicated to the development of diseases of the oral mucosa against the background of various somatic diseases. Chronic cerebral ischemia is an unfavorable background in which various pathological changes can develop in the body, including the oral cavity, in the presence of other unfavorable factors. Therefore, one of the pressing problems of Dentistry Today is the problem of the correlation of dental diseases with chronic brain ischemia. "...patients with impaired cerebral circulation often complain of pain caused by various triggers in 78.18% of cases. Thus, there is a need for the formation of a concept that allows us to propose modern methods of diagnosing, preventing and treating diseases of the oral mucosa, which affect the homeostasis of the oral cavity and the general condition of the body. Every new strategy of diagnosis, treatment and Prevention, which allows you to control the state of cerebral circulation, contributes a lot to the health of the oral mucosa and a healthy organism as a whole.

**Purpose of the research:** Improving the methods of providing dental care in patients

with impaired cerebral conic circulation, which affects the general condition of the body.

Method and materials: Research materials and methods. The object of the study was 68 patients aged 45 to 69, living in the city of Samarkand and the Samarkand region. The examination was carried out at the Department of therapeutic dentistry, which is located on the basis of the Samarkand City adult dental Polyclinic.

Depending on the treatment and preventive measures being taken, all patients were divided into the following groups:

Group 1 (comparison group) – 23 patients with chronic brain ischemia who use traditional treatments.

Group 2 (main group) – 27 patients with CBI with the use of complex treatments.

The control group – 18 practically healthy individuals without side somatic pathology-was formed.

A style of inclusion was applied to the "adult dental status assessment map" developed by its specialists to examine the condition of oral tissue and record the data obtained (2013). In order to study the dental status, clinical, clinicallaboratory examination methods were carried

out. In addition to dentists-doctors, the research team included cardiologists and neuropathologists who studied the general somatic condition of patients.

During the clinical examination, the patient's complaints (the presence of bleeding gums, swelling of the gum edge, bad smell from the mouth, tartar, pathological mobility of teeth and hypersensitivity to temperature and chemical influencers, pain in nutrition), the duration of the disease and the reasons for its development (time of appearance of the first signs, the nature of the disease: the presence of, transferred burned diseases and connection of systemic diseases with diseases of the mucous membrane of the oral cavity was carried out), age, heredity, the presence of harmful habits (smoking, biting objects, etc.).), the patient's hygienic skills were identified.

an index assessment of the dental condition of the oral mucosa was carried out according to the following criteria:

- 1. GreenJ.C., Vermillianj.R. to determine the simplified index of oral hygiene (OHI-S) (1964)
- 2. Papillary-marginal-alveolar index (PMA)
  - 3. Schiller-Pisarev test

Capillary blood from the elbow vein was used as a biomaterial to determine hematological indicators. In blood plasma, endothelium, fibronectin, endothelin-1, homocysteine and Villebrand have been studied for immunoferment study of growth factor using semi-automatic "Mindray" analyzer with kits from the firm "HUMAN" and "IFA-FN" kits (Russia) developed by Zao "NVO Immunoteks" (Russia).

**Result of the research:** All patients in the comparison group (in 100% of cases) had complaints related to the condition of the oral cavity and teeth, since this group was made up of people who turned to the dentist: then, 2 people (1.7%) complained of severe toothache, and 13 (62%) complained of hyperesthesia. It is noteworthy that in the comparison group, hypersensitivity was recorded in 14 (11.9%) people. There were 17 (24%) complaints of bad oral odor in the comparison group and 3 (2.5%)

in the follow-up group. It is noteworthy that many patients do not notice it because they have been taught that bad smell comes from the mouth. The observation group had a large number of patients who complained of dry mouth and aching. That is, there were 17 patients (24%) in the observation group and 4 patients (3.4%) in the comparison group. Often there was a complaint of bleeding gums when brushing teeth - 12 (85%) people were identified in the observation group, and in the comparison group this complaint was found in only 15 (12%) people. When we looked at the dynamics of the hygiene index on Fedorov-Volodkina, the number of patients with a good indicator was 20% in the main group and 20% in the control group. With a satisfactory indicator - 25% and 30%; with an unsatisfactory indicator-30% and 35%; with a bad indicator-20% and 15%; with a very bad GI-5% and 0 respectively. Demek, failure to comply with the rules of oral hygiene in 20% of cases can lead to the development of periodont diseases in the future.

The GI indicators for green-Vermilion were consistent with the Fedorov-Volodkina method, except for the 0-0.6 GI indicator, which was not found at all in the main group. At the same time, compared to these data on the Fedorov-Volodkina method, higher numerical indicators of GI 1.7-2.5 and 2.6 are paying attention, but patients with satisfactory oral conditions were 4 times less.

in the study of the papillary-margionaalveolar index in groups of patients examined by patients with chronic cerebral ischemia and practically healthy individuals. milk a inflammatory response was observed in all groups of patients, the inflammation was statistically much higher in the group of patients with cerebral ischemia and was 48.4 ± 3.11 in the index. The" RMA " index found significant Intergroup differences in groups of patients with and without cerebral ischemia, with a difference rate of 20.9%. This suggests that patients with cerebral ischemia are more susceptible to inflammatory periodontic disorders.

Analysis of the results of the Schiller-Pisarev examination found that there were significant Intergroup differences in groups of patients with and without cerebral ischemia, which was 65.4%.

It is a confirmation factor for patients with cerebral ischemia that parodont is prone to pathological processes, and parodont indicates an inflammatory response in tissues.

analysis of the results of the examination of indicators of the hemostasis system in patients with chronic cerebral ischemia shows that in this contingent of patients there is an increase in the time of Hageman-dependent fibrinolysis and a decrease in the fibrinolytic activity of the vascular endothelium. The thinning of the fibrinolytic activity of the vascular endothelium may be associated with a decrease in the dissociation of the t-PA plasminogenic tissue activator.

**Conclusion:** Thus, when comparing the results of clinical examination and dental treatment of groups of patients with impaired cerebral circulation, an appropriate therapeutic result was found in the recommended complex treatment group compared to the traditional treatment group. After complex therapy, all studied hygienic indices were much lower than those of the pre-treatment and traditional therapy group. In this case, the GI-hygiene index GreenJ.C., Vermillianj.R. in terms of 0.31±0.33 kildi, which in turn indicated good oral hygiene, RMA index (15.74±1.08%) and gum bleeding indexes (0.48±0.11 points), however, indicated a mild form of inflammation. in the study of dental status of patients with chronic brain ischemia and practically healthy individuals, unsatisfactory and poor levels of hygiene were found, the average values of the OHI-s simplified hygiene index were 3.36±0.06 in the control group and 3.53±0.07 in the group of patients with chronic brain ischemia. in patients with chronic brain ischemia, Hageman-associated fibrinolysis was observed to increase by 8.7% of the time and decrease the fibrinolytic activity of vascular endothelium by 1.42 times. The thinning of the fibrinolytic activity of vascular endothelium may be associated with a decrease the dissociation of the T-PA tissue plasminogen activator.

## **References:**

- Хайдаров А.М., Муратова С.К. Влияние хронической ишемии мозга на функциональное состояние слизистой оболочки полости рта //Stomatologiya. Ташкент. 2019. №4 (77). –C.101-103.
- 2. Хайдаров А.М., Хожиметов А.А., Муратова С.К. Анализ особенностей стоматологического статуса и показателей гемостаза у больных с хронической ишемией мозга //Биология ва тиббиёт муаммолари. Самарканд. 2020. -№2. С. 88-92.
- 3. Muratova S., Khaydarov A., Shukurova N., The peculiarities of endothelial dysfunction indicators in patients with chronic brain ischemia //International Journal of Pharmaceutical research. apr-jun (AKIII) 2020. –Vol.12. issue 2 P.1725-1728.
- 4. Хайдаров A.M., Муратова С.К. Хожиметов Шукурова A.A., H.T. Состояние клеточного состава микрофлоры мукозального эпителия ротовой полости больных хронической ишемии мозга //Ўзбек тиббиёт журнали. - Тошкент. - 2021. -Nº3. - C. 34-42.
- 5. Хайдаров А, Муратова С.К., Жабриева А. Особенности микроциркуляции полости на фоне хронической ишемии мозга. Тошкент тиббиёт академияси ахборотномаси. 2021.-С 161-163
- 6. Хайдаров A.M., Муратова С.К. Хроническая ишемия мозга, как фактор нарушения функционального состояния слизистой оболочки полости рта //«Фундаментал тиббиётнинг клиник долзарб муаммолари ва масофавий таълим имкониятлари» халкаро онлайн конференция материаллари. Самарканд, 2020. -85-86 бет.
- 7. Mypaтова C.K., Шукурова H.T. Surunkali miya ishemiyasida og'iz bo'shlig'i shilliq qavati funktsional holatining buzilishini o'rganish omili //"Ўзбекистонда илмий-амалий тадқиқотлар"

Volume 19 | April 2023

- мавзусидаги Республика 16-кўп тармоқли илмий масофавий онлайн конференцияси материаллар. Тошкент, 2020. 102 бет.
- 8. Шукурова H.T., Муратова Стоматологический статус у больных хронической ишемией //«Современная медицина фармацевтика: новые подходы и актуальные исследования». Матер. международ. научнопракт.конф. студентов-медиков молодых учёных. -Самарканд, 2021. -C. 242.
- 9. Муратова С.К. Стоматологический статус и показатели гемостаза у больных с хронической ишемии мозга //Методические рекомендации. Ташкент, 2021. 19 с.
- 10. Банченко Г. В., Флейшер Г. М., Сиворов К. А. и др. // Медицинский алфавит. 2012. Т. 1, № 1. С. 38–44.
- 11. Борисов С. Е., Мишин В. Ю., Аксенова В. А. // Проблемы туберкулеза и болезни легких. 2017. № 11. С. 47–63.
- 12. Ермакова Л. Г., Павленко С. Г. // Туберкулез, легочные болезни, ВИЧ-инфекция. 2010. № 3 (3). С. 30–37.
- 13. Красильников И. В., Кисличкин Н. Н., Зазимко Л. А. // Эффективность методов решения и выявления туберкулеза-2019
- 14. Газете "Правда Востока" в № 133 (29096)
- 15. 15. Агапова С.Н., Юнусов Ю.Х., Херсонская Ф.И. Особенности лечения хронического рецидивирующего афтозного стоматита у больных с нарушением психики // Теория и практика стоматологии. Ташкент.-2011.-С.8-10.
- 16. Азнабаев М.Т., Суркова В.Т., Талинова Л.Р. и др. Керакол в комплексном лечении патологии роговой оболочки. Мет. Рекомендации. Уфа.-2009.- С.8.
- 17. Акбарова Д.С. Разработка и клиника лабораторное обоснование применения солкосорил держащей

- пленки Диплен-дента Спри лечении травм слизистой оболочки полости рта. Автор.дис...д.м.н.- М.-2004.-С.50.
- 18. Акбарова Д.С. Применение солкосерил содержащей пленки Диплен-дента Спри лечении травм слизистой оболочки полости рта. // Стоматология. -2004.-№4.-С.33-35.