



## Dynamics of Indicators Characterizing the Clinical Condition of the Oral Mucosa

Sobirov Shuxrat Solijonovich <sup>1</sup>

<sup>1</sup> Bukhara State Medical Institute

**Abstract: Relevance.** The examination of patients and the registration of indicators were carried out strictly in accordance with the recommendations described in the chapter "Materials and methods of research" on the 7th, 14th day and a month after the application. The clinical criteria for the effectiveness of treatment were: the dynamics of the general condition (subjective and objective indicators), the timing of epithelialization of lesions and the results of biochemical and hematological studies.

Analyzing the complaints made by patients, it was revealed that with each visit there was a tendency to decrease in the indicators of symptoms in all the examined groups.

After the course of treatment, the average values of symptoms characterizing the complaints of patients in all groups received positive dynamics. In the second group, it was  $1.09 \pm 0.31$  points, which is 2.1 times lower than the value before treatment. In the group with traditional treatment,  $0.91 \pm 0.27$  points, 2.6 times lower than baseline values. A more significant result was observed in the main group, where the average value of complaints decreased by 3.8 times and amounted to  $0.61 \pm 0.19$  points.

Thus, in the groups examined with mono and traditional treatment, after a month the indicators decreased: pain by 40.8% and 55.4%, which amounted to  $1.61 \pm 0.16$  points and  $1.15 \pm 0.73$  points, respectively.

The burning sensation in the second group decreased by 41.9%, in the group with traditional treatment by 50.7%. Complaints of roughness and tightness of the oral mucosa in the second group decreased by 60.7% and 78.8%, and in the third group by 61.9% and 91.1%.

At 2-3 weeks of treatment, a progressive increase in the effectiveness of topical application of anolyte and catholyte in the oral cavity of patients of the main group was noted, which objectively affected the results of the clinical examination.

After 2 weeks, pain indicators in this group decreased to  $1.8 \pm 0.12$  points, and after a month by 70% and amounted to  $0.84 \pm 0.12$  points.

Complaints of burning of the oral mucosa decreased to  $0.96 \pm 0.11$  points, which is 67% lower than the initial data, the roughness of the mucosa decreased by 4.2 times and amounted to  $0.52 \pm 0.12$  points, and complaints of tightness of the oral mucosa decreased by 92% (Fig. 10).

As a result, when identifying complaints made by patients a month after the treatment, it was found that in the group with complex therapy, the effect was more significant, which confirms a significant decrease in these symptoms.

In all three groups, when analyzing the UIGR index, OHI-S, a decrease in the indicator was also noted. At the initial examination, the average value of the simplified oral hygiene index was  $2.0 \pm 0.12$  points in the third group;  $2.1 \pm 0.14$  points in the main group;  $1.81 \pm 0.13$  points in the second group. After the measures taken, the average value of the index decreased in the group with monotherapy to  $1.3 \pm 0.09$  points, which is 1.4 times less than the initial data. In the group with traditional treatment, the index indicators after a month were  $0.8 \pm 0.09$  points, i.e., 2.5 times lower than the indicators at the time of treatment. In the main group, the average value of UIG decreased by 4.5 times and amounted to  $0.47 \pm 0.06$  points, which corresponds to a good indicator of the hygienic condition of the oral cavity.

The relief of the inflammatory process on the oral mucosa is evidenced by a significant decrease in the papillary-marginal-alveolar index (PMA) and gingival sulcus bleeding index (SBI).

At the time of treatment in the group with traditional treatment, the PMA index corresponded to  $34.5 \pm 0.94\%$ ; SBI –  $24.0 \pm 2.24\%$  after treatment, a decrease in these indicators was noted to  $10.31 \pm 0.62\%$  and  $10.69 \pm 0.64\%$ , respectively. The dynamics also turned out to be positive in the group with monotherapy, so the PMA value in the second group decreased from  $35.44 \pm 1.38\%$  to  $12.83 \pm 0.97\%$ , and the SBI index from  $25.17 \pm 2.58\%$  to  $12.17 \pm 0.42\%$ . In the main group, the dynamics of these indicators was more significant. Thus, the value of the papillary-marginal-alveolar index decreased from  $34.4 \pm 1.02\%$  to  $6.88 \pm 0.31\%$ , and the gingival sulcus bleeding index decreased to  $5.68 \pm 0.45\%$ , which is 4.4 times less than the initial indicators.

The exponential positive dynamics of the tongue plaque index - WTC against the background of treatment was confirmed by a significant decrease in this indicator. In the main group after treatment, it was  $0.96 \pm 0.17$  points, which is 8.6 times lower than the initial indicator, in groups 2 and 3 after a month, the values of this index corresponded to  $3.11 \pm 0.36$  and  $1.73 \pm 0.26$  points, respectively, which is 2.8 and 4.9 times less than the indicators at the time of treatment.

Regular monitoring of the condition of the oral mucosa of patients made it possible to register the dynamics of epithelialization of erosive and ulcerative lesions. At the end of the course of treatment, various epithelialization periods were revealed. In the group where electrochemically active solutions were included in the complex treatment, a significant acceleration of healing processes was observed, which was expressed in a decrease in the size of erosive mucosal defects and earlier epithelialization compared to other groups.

So a week later in this group after the treatment, the area of the lesion was  $2.49 \pm 0.13$  cm<sup>2</sup> and was 1.2 times smaller than before the start of treatment. In the second and third groups, respectively,  $2.74 \pm 0.18$  cm<sup>2</sup>;  $2.48 \pm 0.17$  cm<sup>2</sup>, which is 1.1 and 1.2 times less than the area in these groups at the time of treatment. 2 weeks after the treatment, the indicators differed significantly: in the second group, the area of the erosive and ulcerative surface of the oral mucosa was  $2.39 \pm 0.18$  cm<sup>2</sup> and thus was 1.3 times less than before the start of treatment, in the 3rd and main groups, respectively,  $2.05 \pm 0.14$  cm<sup>2</sup>,  $1.47 \pm 0.4$  cm<sup>2</sup>, which is 1.5 and 2.1 times less than the original area. The most significant results were noted a month later. At the same time, the area of the lesion in the subjects in the group with monotherapy was  $2.2 \pm 0.19$  cm<sup>2</sup>, in group 3 –  $1.65 \pm 0.15$  cm<sup>2</sup>, in the main group the damage area was  $0.74 \pm 0.06$  cm<sup>2</sup>. A comparative analysis of the positive dynamics of erosive and ulcerative lesions of the SOPR in the main group showed a decrease in the damage zone by 2.8 times, in the second and third groups by 1.4 and 1.8 times, respectively.

Such dynamics of various parameters of the state of the periodontal and oral mucosa indicates complex multifactorial relationships between them.

Thus, the analysis of the results a month after the treatment showed that the lowest therapeutic effect was achieved in the group with EHAR monotherapy, the average values were obtained in the group of patients with traditional treatment, and in patients with complex therapy, the effect of treatment was more significant, which is reliably confirmed.

The examination of patients and the registration of indicators were carried out strictly in accordance with the recommendations described in the chapter "Materials and methods of research" on the 7th,

14th day and a month after the application. The clinical criteria for the effectiveness of treatment were: the dynamics of the general condition (subjective and objective indicators), the timing of epithelialization of lesions and the results of biochemical and hematological studies.

Analyzing the complaints made by patients, it was revealed that with each visit there was a tendency to decrease in the indicators of symptoms in all the examined groups.

After the course of treatment, the average values of symptoms characterizing the complaints of patients in all groups received positive dynamics. In the second group, it was  $1.09 \pm 0.31$  points, which is 2.1 times lower than the value before treatment. In the group with traditional treatment,  $0.91 \pm 0.27$  points, 2.6 times lower than baseline values. A more significant result was observed in the main group, where the average value of complaints decreased by 3.8 times and amounted to  $0.61 \pm 0.19$  points.

Thus, in the groups examined with mono and traditional treatment, after a month the indicators decreased: pain by 40.8% and 55.4%, which amounted to  $1.61 \pm 0.16$  points and  $1.15 \pm 0.73$  points, respectively.

The burning sensation in the second group decreased by 41.9%, in the group with traditional treatment by 50.7%. Complaints of roughness and tightness of the oral mucosa in the second group decreased by 60.7% and 78.8%, and in the third group by 61.9% and 91.1%.

At 2-3 weeks of treatment, a progressive increase in the effectiveness of topical application of anolyte and catholyte in the oral cavity of patients of the main group was noted, which objectively affected the results of the clinical examination.

After 2 weeks, pain indicators in this group decreased to  $1.8 \pm 0.12$  points, and after a month by 70% and amounted to  $0.84 \pm 0.12$  points.

Complaints of burning of the oral mucosa decreased to  $0.96 \pm 0.11$  points, which is 67% lower than the initial data, the roughness of the mucosa decreased by 4.2 times and amounted to  $0.52 \pm 0.12$  points, and complaints of tightness of the oral mucosa decreased by 92% (Fig. 10).

As a result, when identifying complaints made by patients a month after the treatment, it was found that in the group with complex therapy, the effect was more significant, which confirms a significant decrease in these symptoms.

In all three groups, when analyzing the UIGR index, OHI-S, a decrease in the indicator was also noted. At the initial examination, the average value of the simplified oral hygiene index was  $2.0 \pm 0.12$  points in the third group;  $2.1 \pm 0.14$  points in the main group;  $1.81 \pm 0.13$  points in the second group. After the measures taken, the average value of the index decreased in the group with monotherapy to  $1.3 \pm 0.09$  points, which is 1.4 times less than the initial data. In the group with traditional treatment, the index indicators after a month were  $0.8 \pm 0.09$  points, i.e., 2.5 times lower than the indicators at the time of treatment. In the main group, the average value of UIG decreased by 4.5 times and amounted to  $0.47 \pm 0.06$  points, which corresponds to a good indicator of the hygienic condition of the oral cavity.

The relief of the inflammatory process on the oral mucosa is evidenced by a significant decrease in the papillary-marginal-alveolar index (PMA) and gingival sulcus bleeding index (SBI).

## LITERATURE USED

1. Арунов Т.И. Влияние электрохимических факторов гальваноза на течение красного плоского лишая слизистой оболочки полости рта: Автореф. дис... канд. мед. наук. М 2010.-22с.
2. Бабушкин О.С., Назин В.А. Стратегия использования ЭХА растворов в многопрофильной больнице // Электрохимическая активация: третий междунар. симпозиум: сб. науч. тр. - Москва, 2001. - С.46-50.
3. Баженов Л.Г. Хаджибеков А.М., Ганиходжаев С.С. Влияние нейтрального анолита на чувствительность микроорганизмов к антибиотикам // Электрохимическая активация:

- доклад и краткое сообщение второго международного симпозиума. - Москва, 1999. - С.124-125.
4. *Базыка Д.А. Динамика клинико-морфологической картины различных форм красного плоского лишая в процессе комплексной терапии больных: автореф. дис. ... канд. мед. наук. – Киев, 1983. – 16 с.*
  5. Володина Е.В., Максимовский Ю.М., Лебедев К.А. Комплексное лечение красного плоского лишая слизистой оболочки рта // *Стоматология*. - 1997. - №2. - С.28-32.
  6. Вольвач С.И., Банченко Г.В., Демина Т.А. Клинико-функциональное исследование красного плоского лишая слизистой оболочки полости рта при различной общесоматической патологии // *Новое в стоматологии*. - 1998. – №9. – С.28–34.
  7. Khabibova N.N. Characteristic features of free-radical processes and antioxidant protection in the oral cavity during chronic recurrent aphthous stomatitis// *European Science Review*. - 2018. - P. 191-193.
  8. Khabibova N.N. Changes in biochemical and immunological indicators mixed saliva of patients with chronic recurrent aphthous stomatitis// *European journal of pharmaceutical and medical research*. –2018. – (5) 11. – P. 143-145.
  9. Хабибова Н.Н. Клинико-биохимические особенности течения псевдоаллергических вариантов хронического рецидивирующего афтозного стоматита// *Проблемы биологии и медицины*. – 2018. - № 4 (104). – С. 220-222.
  10. Хабибова Н.Н., Саидов А.А., Саидова М.Р. Сурункали рецидивирловчи афтозли стоматитда липидларни перекис оксидланишини ўзига хос хусусиятлари ва оғиз бўшлиғи антиоксидант химоясининг ҳолати// *Тиббиётда янги кун*. – 2018. - № 3 (23). – Б. 61-63.
  11. Хабибова Н.Н., Вахидова М.А. Оценка защитной системы слизистой оболочки ротовой полости при хроническом рецидивирующем афтозном стоматите// *Вестник ТМА*. –2019. - № 3. – С. 131-133.
  12. Хабибова Н.Н., Хабилов Н.Л. Роль адгезивных молекул в развитие афтозного стоматита// *Stomatologiya*. Ташкент. -2019. - № 3. – С. 32-36.
  13. Khabibova N.N. Clinical characteristics of patients with recurrent aphthous stomatitis// *Annals of international medical and dental research*. – 2019. – Vol. 5. Issue 5. - P. 64-66.
  14. Хабибова Н.Н., Хабилов Н.Л. Оценка сосудисто-тканевых расстройств и регионарного кровотока при хроническим рецидивирующим афтозном стоматите// *Новый день в медицине*. - 2019. – 3 (27). – С. 262-266.
  15. Khabibova N.N., Khadjimetov A.A. Some occurrence aspects of chronic recurrent aphthous stomatitis of the oral cavity// *Global Journal of Medical, Physical and Health Education*. – 2019. - Vol. 7 (3). - P. 284-286.
  16. Khabibova N.N. Characteristic features of the biochemical indicators of mixed saliva in patients with chronic recurrent aphthosis stomatitis// *Global Science Research Journals*. - 2019. - Vol. 7 (8). – P. 521-526.
  17. Хабибова Н.Н., Олимова Д.В., Норова М.Б. Лечение начальных форм кариеса методом инфильтрации. // *Тиббиётда янги кун*. с2020. - № 4 (32). – Б. 290-292
  18. Habibova N.N., Olimova D.V. Features of clinical manifestations, diagnostics and treatment of glossalgia. // *New Day in Medicine*. –2021. - № 6 (38). – P. 96-98