MODERN MEDICINE AND PRACTICE
http://innovatus.es/index.php/ejmmp
EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE
Vol. 2 No. 11 (Nov - 2022) EJMMP ISSN: 2795-921X

OPTIMIZATION OF DIAGNOSIS OF LICHEN PLANUS

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Relevance: Lichen planus (CRL) is one of the most common and clinically manifest skin-mucous dermatoses. According to different authors, the population frequency of CPL (0.4-1.9%) varies in different regions of the world and the proportion to other dermatoses. An important obstacle to the study of the epidemiology of CPL is the significant differences not only in the frequency of patients' visits to dentists and dermatologists, but also in the assessment of the frequency of combined lesions of the oral mucosa and skin by both dentists and dermatologists.

At the same time, the population frequency of CPL lesions of the oral mucosa, reaching 0.5-2.2%, depending on the region of the world, allows us to regard this disease as the most frequent autoimmune lesion, the early detection of which by doctors of different specialties will help prevent its malignant transformation.

CPL affects women almost twice as often as men. It is significant that men are more likely to get sick at a young age, and women get sick after 50 years. The peak of the development of CPL of the oral mucosa occurs at 30-60 years, of which 62-67% are women 40-60 years old, which may indirectly indicate the pathogenetic role of menopause and post-menopausal disorders of the development of CPL.

Despite the fact that adults 50-60 years of age are more likely to suffer from CPL, however, its development in the range of 30-60 years is noted in 33%, 51-60 years – in 19%, children and people over 70 years of age - in 3-4% of cases. In recent years, CPL with lesions of the oral mucosa has become increasingly common at a younger age and in children. This is due to the deterioration of the environmental situation and the increased impact of stressful situations on a person [1.3.5.7.9.11].

The provoking moments of the development of CPL were violations of the microbiocenosis of the oral cavity, a decrease in local and general immunity, stress, exacerbation of concomitant somatic disease, taking medications, etc.

CPL SOPR is a multifactorial disease, currently it is generally recognized that the leading role in the development of red lichen planus of the oral mucosa and lip immunological shifts. Immune disorders in CPL are caused by a violation of the cellular and humoral links of immunity, as well as a change in the functional state of the regulatory mechanisms of the immune system that control the body's response to the antigen at the molecular, cellular, tissue and organ levels [2.4.6.8.10].

The oral cavity has not only general immunity, which equally protects all organs and tissues of the body, but also its own local immunity, which plays a major role in protecting against infection of pathological conditions, the content of protective factors (humoral IDA, IgM, IgG lactoferin, etc.) [Lukinykh L. M., 2013].

The aim of the study is to improve the criteria for the diagnosis of lichen planus.

Materials and methods: The object of the study were 62 patients with erosive and ulcerative form of lichen planus of the oral mucosa (ESF CPL SOPR) who applied to the department of therapeutic dentistry of the clinic of the Tashkent State Dental Institute for the period from 2018 to 2019, who were divided into three groups, patients of the comparison group (30) and patients of the main group (32), 18 people without pathology of the oral mucosa served as a control.

Table 1 Distribution of patients with CPL by gender and age

Paul	Age										Σ	
	20-29		30-39		40-49		50-59		60-69			
	абс	%	абс	%	абс	%	Абс	%	Абс	%	Абс	%
Husband.	5	8,06	7	11,3	6	9,7	2	3,2	1	1,6	21	33,8
Wives.	2	3,2	3	4,8	10	16,1	12	19,4	14	22,6	41	66,1
Total	7	11,26	10	16,11	16	25,8	14	22,6	15	24,2	62	100

Under our supervision were 62 patients with erosive and ulcerative form of lichen planus of the oral mucosa (EYAF CPL SOPR) Of these, men were 21 (33.8%), women 41 (66.1%), aged 20-29 years - 5 men (8.06%) and 2 women (3.2%); aged 30-39 years – 7 men (11.3%) and 3 women (4.8%); aged 40-49 years – 6 men (9.7%) and 10 women (16.1%); aged 50-59 years -2(3.2%) men and 12 women (19.4%); aged 60-69 years1 (1.6%) men and 14 women (22.6%) (Table 1).

The control group consisted of 18 people, of whom 11 (61.1%) were women, 7 (38.8%) were men without pathology of COPD. The comparison group (30) consisted of 11 (36.66%) men and 19 (63.33%) women. The main group (32) patients consisted of 10 (31.25%) men and 22 (68.75%) women.

The examination of patients was carried out according to a single scheme, for each patient, a dental outpatient card (043-Y) and an individual examination card developed by us of a stomatological patient were filled in, where the results of dental, clinical and laboratory studies were noted.

The collection of anamnesis of patients' lives contributed to the identification of the causes of the development of EAF CPL SOPR, the presence of bad habits (smoking, biting lips, cheeks), seasonality, the intake of irritating food, the nature of nutrition, neuropsychiatric stress, prosthetics, taking medications, changing toothpastes and other hygiene products, determining the duration of the disease, allergic status, burdened heredity, transferred and concomitant diseases, localization of the lesion, the presence and condition of crowns, prostheses, dissimilar metals [13.15.17.19.21.23.25].

Results of the study: Clinical data were included in the study map, with the included scheme-topograms recommended by WHO in the modification of N.S. Gileva et al. in 2008. In accordance with this scheme, Morphological elements were observed in different sections of the SOPR.the most common localization of the lesion of the elements of the CPL of the oral mucosa was identified.

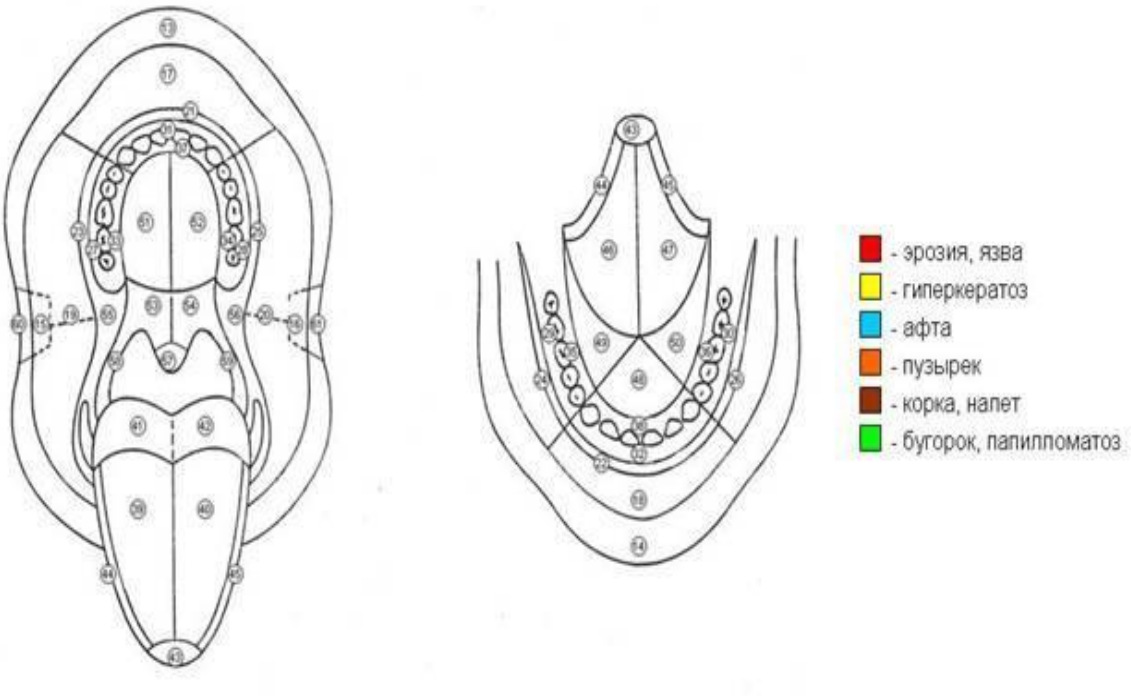

Fig. 2. Scheme-topogram of the SOPR for localization of lesion elements in zones modified by O.S. Gileva.

Clinical data were entered into the study map, with the included scheme-topograms recommended by WHO in modification by O.S. Gileva et al. in 2008. In accordance with this scheme, the most common localization of the lesion of the elements of the CPL of the oral mucosa was identified. Morphological elements were observed in different sections of the SOPR.

Clinical examination was carried out in all patients, carried out by the generally accepted method - collecting anamnesis of the disease, clinical examination, determination of the assessment of the hygienic condition of the oral cavity – OHI-S Green – Vermillion index, PMA – papillary-marginal-alveolar index, CPI index (K - carious, P - filled, Y –removed teeth).

Table 2. Dynamics of changes in index indicators by observation periods (M±m)

Terms of treatment	ГИ (OHI-S)		PMA (%)	
	Main gr n=32	Gr.compare n=30	Main gr. n=32	Gr.compare n=30
Before treatment	2,46±0,22	2,89±0,24	41,32±2,05	38,21±0,05
3 day	2,44±0,11	2,51±9,23	22,66±2,13	32,42±2,18
7 day	2,24±0,26	2,33±0,24	22,21±1,71	24,52±0,42
30 day	1,03±0,25	1,73±0,05	14,69±2,66	17,33±1,44
90 day	0,63±0,25	0,92±0,22	10,27±2,13	11,62±2,66
180 day	0,40±0,27	0,61±0,25	7,15±2,64	9,17±2,17
Control n=18	0,78±0,21		5,28±2,11	

At the end of the day, the index showed that the patient was very low, by comparison with the control. In this case, the basic group and group were shown to be equal to 2,46±0,22 and 2,89±0,24±0,78 ± 0,21. Showing PMA in the basic group and group of people to treat showed that they were sootvenno 41.32±2.05 and 38.21±0.05, in control -5.28±2.11 (table 3.5.).

On 3 days from the beginning of treatment ozonirovannym kunzhutnym maslom gigienicheskoe sostoya polostom GI (OHI-S) and showing PMA index zametno ulukšilisь, by sravneniju s gruppoй sravneniya, meaning of days showing registrrovalisь соотвенно 21,65% (2,44±0,11) - 7,08% (2,51±9,23) and 50% (22,66±2,13) – 15,16% (32,42±2,18), the index of OHI-S and PMA V 1.28 and 1.8 V basic groups, 1.08 and 1.1 V groups (R<0.001).

On 7 days after the treatment in the basic group and group sravneniya gigienicheskiy index neskolko snizhalsya, by sravneniya with indications to treatment and co-operation 28,67% (2,24±0,26) -25,08% (2,33±0,24), it shows a reduction of 1,4 Raza and 1,3 Raza by comparison with the indicators to the treatment (R<0,001).Showing PMA in the basic group and group level at 7 days of treatment was sootvenno 46.25% (22.21±1.7) and 35.83% (24.52±0.4), which showed a decrease in the process of sootvenno V 1.86 Raza and 1.55 Raza per level showing to Treat (R<0,001).

On 30 days after the treatment in the basic group and group sravneniya gigienicheskiy index dostoverno snijalsya, by comparison with the indicators to the treatment and co-operative 61.2% (1.03±0.25) and 44.38% (1.73±0.05), which showed the reduction sootvetvenno V 2,5 Raza and 1,8 Raza by comparison with indicators to treatment (R<0,001). Rmav basic groups and groups were equal to 90 days of treatment 64,45% (14,69±2,66) and 54,65% (17,33±1,44), which showed a reduction in the process of treatment of patients with 2,81 Raza and 2,2 Raza by comparison with the indicators to treatment (R<0.001)[12.14.16.18.20.22.24].

At 90 days after treatment in the basic group and group sravneniya gigienicheskiy index we mean the reduction, by comparison with the indicators to the treatment and co-operation 79.91% (0.63±0.25) and 70.42% (0.92±0.22), which showed the reduction of co-operation 4.9 Raza and 3.4 Raza by comparison with indicators to treatment (R<0.001).Showing PMA in the basic group and group level at 90 days of treatment was sootvetstvenno 75.15% (10.27±2.13) and 69.59% (11.62±2.66), which showed a decrease in the process of sootvetstvenno v 4.02 Raza and 3.2 Raza per level showing to Treat (R<0,001).

On 180 days after the treatment in the basic group and group sravneniya gigienicheskiy index dostoverno snijalsya, by comparison with the indicators to the treatment and co-operative 87.27% (0.40±0.27) and 80.39 (0.61±0.25), which showed the reduction of the sootvetvenno V 7,8 Raza and 5,1 Raza by comparison with indicators to treatment (R<0,001).Showing PMA in primary group and group grading at 180 days of treatment was sootvenno 82.7% (7.15±2.64) and 76.01% (9.17±2.17), it shows a reduction in the rate of fire in 5,77 Raza and 4,16 Raza by comparison to treatment (R<0,001) (Table 2).

Equipment "ozonator kliničeskiй O3", elaborated in scientific-production prepreyyem "Asia-R" successfully applied

different types of Medicine.

Until the treatment of microflora of the surface of the Cape characterizovalye likiem associacii different pathogens. From the Chilla microorganism V naibolee vysokih titrah obnaruživališь zolotistye staphylokokki and gemolitičeskye streptocokki, cut-other conditional pathogens, on the background meaning lower submersion of normoflorya (Table 3).

Showed conditionally pathogenic microorganisms LP and LN escherichii V titrach 1.45±0.08 -2.10±0.10 and 3.30±0.15 -3.35±0.15 lgkoe/ML, also absent the biotope of the sex of RT V norm. Meaning of the root

crop protein: up to 1.40±0.02 -1.45±0.07 lgkoe/ml, at showing norms 1.10±0.10 lgkoe/ML and Gribov genus Candida–up to 3.60±0.17 -3.70±0.16 lgkoe/ml at norm -2.10±0.10 lgkoe/ML (Table 3).

Table 3The content of microorganisms in the oral cavity of patients with ESV CPL SOPR before and after treatment in Lg.KOE ml (M±m)

	Groups of microbes	Standard	Control		Comparison Group		Main group	
			до леч.	после леч.	до леч.	после леч.	до леч.	после леч.
	Total number of microorganisms	6,30±0,51	8,22±0,34	7,20±0,22	8,30±0,41	7,00±0,31	8,20±0,36	6,40±0,30
	Lactobacilli	3,20±0,15	2,00±0,06	2,60±0,11	1,95±0,06	2,95±0,11	2,10±0,11	3,10±0,15
	Staf.golden	-	4,60±0,17	2,30±0,12	4,50±0,16	1,20±0,03	4,70±0,17	-
	Staff.epidermis.	2,75±0,11	2,00±0,07	2,30±0,06	2,15±0,07	2,50±0,11	2,10±0,06	2,70±0,12
	Staff.saprophytes	4,30±0,20	2,48±0,12	3,60±0,12	2,60±0,12	4,05±0,20	2,55±0,12	4,10±0,11
	Strept.hemolytic.	-	5,20±0,24	2,70±0,10	5,15±0,15	1,00±0,05	5,30±0,20	-
	Strept.non-gemolite.	4,00±0,21	2,30±0,06	3,20±0,15	2,10±0,11	3,20±0,16	2,20±0,10	4,10±0,11
	Escherichia LP	1,30±0,11	2,00±0,09	1,20±0,03	1,45±0,08	1,00±0,02	2,10±0,10	0,50±0,02
	Escherichia LN	-	3,40±0,14	1,60±0,06	3,30±0,15	-	3,35±0,15	-
	Proteus	1,10±0,10	1,50±0,06	0,80±0,03	1,40±0,02	0,70±0,08	1,45±0,07	0,61±0,12

	Fungi of the genus Candida	2,10±±0,10	3,70±0,16	2,70±0,11	3,60±0,17	2,30±0,01	3,70±0,16	2,00±0,09

Against the background of an increase in the concentration of pathogenic and conditionally pathogenic microflora, a significant decrease in the titers of representatives of normal microflora was recorded. Thus, the levels of saprophytic staphylococcus and nonhemolytic streptococcus decreased by more than 1.5 times and amounted to 2.60±0.12 -2.30±0.11 and 2.55±0.12 -2.20±0.10LGK/ml, respectively, with average titers in the control of 4.30±0.20 and 4.00±0.21LGK/ml.

Naturally, the combination of pathogenic hemolytic streptococcus and Staphylococcus aureus with fungi of the genus candida in case of ESF CPL SOPR is extremely unfavorable. The persistence of bacterial pathogens forms dysbiosis of the oral cavity. Clinical and microbiological manifestations of dysbiosis before the start of treatment in the compared groups were homogeneous and in 9.57 -10.00% of cases corresponded to a dysbiotic shift; in 46.66 -50.00% of patients, changes in microbiocenosis were assessed as dysbiosis of the I-II stage and in 40.62 -43.33% as dysbiosis of the III stage.

It should be noted that in the compared groups there were no patients with normocenosis, patients with severe manifestations of stage IV dysbiosis were not registered at the same time. The use of ozonated sesame oil in the treatment of patients of the main group significantly changed the detection levels and ratios of microorganisms in the oral cavity. As a result of the destructive effect of ozone on the cytoplasmic membranes of microbes, bacteria and viruses, it was possible to reduce pathogenic and opportunistic microorganisms such as hemolytic Streptococcus or Staphylococcus aureus, E. coli, Candida fungi. (Dzagoeva D.K., 2014).

At the same time, titers of resident microflora increased significantly: saprophytic staphylococcus, non-hemolytic streptococcus, lactobacilli.The analysis of the use of ozonated sesame oil in the oral cavity in the comparison group and the main group showed its high effectiveness compared to basic therapy. Diagnostically significant changes in microbiocenosis in patients of the control group consisted in a decrease in total microbial contamination by 12.52% ($P>0.05$). The corresponding decreases in the comparison group and the main group were 14.94% ($P<0.05$) and 22.24% ($P<0.01$) [21.22.24.25].

The percentage of reduction in titers of pathogens such as Staphylococcus aureus and hemolytic streptococcus was 50.0% ($P<0.01$) and 48.08% ($P<0.01$) in the control group; 73.34% ($P<0.001$) and 80.59% ($P<0.001$) respectively in the comparison group; pathogenic microorganisms were absent.The levels of reduction of conditionally pathogenic microorganisms, such as Escherichia coli and LN, E. coli, proteus and Candida fungi in the control group were respectively 40.06% ($P<0.01$); 52.95% ($P<0.01$); 46.67% ($P<0.01$) and 27.03% ($P<0.01$) versus 68.96% ($P<0.01$); 100%; 50.00 ($P<0.01$) and 36.12% in the comparison group.

In the main group, the average titers of Escherichia LP decreased by 76.24%, Escherichia LN – by 100%; proteus – by 57.84% and Candida fungi – by 45.95% ($P<0.01$) (Fig.3.6).Thus, the maximum efficiency of elimination of pathogenic and opportunistic microorganisms was recorded in the main group and the minimum in the control group.The elimination of conditionally and pathogenic microflora was synchronized with an increase in the titers of representatives of normocenosis.

Thus, in the control group, the titers of lactobacilli, saprophytic staphylococcus and non-hemolytic streptococcus increased by 30.0% ($P<0.01$); 45.16% ($P<0.01$) and 52.38% ($P<0.01$). The corresponding increases in the comparison group and the main group were -51.28% ($P<0.01$); 55.77% ($P<0.01$); 52.38% ($P<0.01$) and 57.62% ($P<0.01$); 60.78% ($P<0.01$) and 86.36% ($P<0.01$)(table.3), (fig.3)

Thus, the results of microbiological research methods have shown that when using ozonated sesame oil, there is an inhibition of conditionally pathogenic and pathogenic microflora with simultaneous activation of representatives of normal microflora.

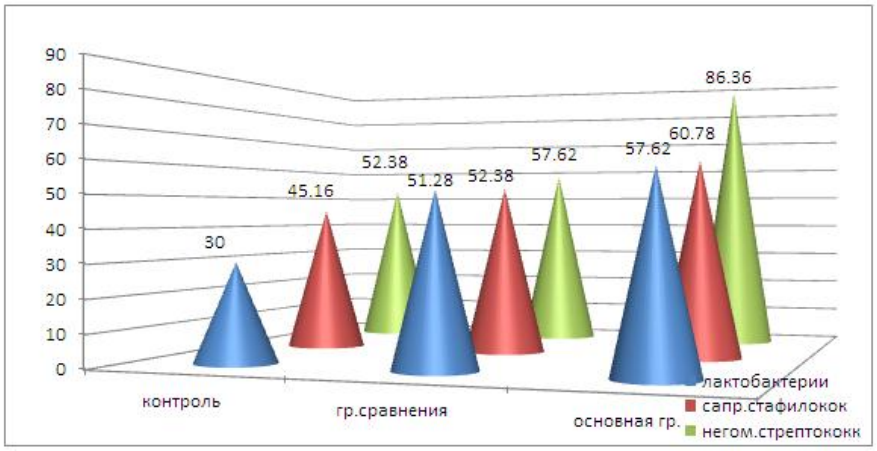

Fig.3. Increasing titer of resident microflora after complex treatment

Table 4 the state of microbiocenosis of the oral cavity of patients with ESF CPL SOPR before and after treatment (M±m)

Dysbiosis	Counter.group n=18		Comparison groupn=30		Main group n=32	
	до леч.	после	до леч.	после	до леч.	после
normocenosis	-	4	-	13	-	17
		22,22±8,0		43,33±9,5		53,12±9,4
shift	1	7	3	11	3	15
	5,53±5,04	38,88±9,4	10,00±6,2	36,66±9,4	9,57±5,8	46,87±9,5
I – II degrees	9	7	14	6	16	
	50,01±9,6	38,88±9,4	46,66±9,7	20,00±7,7	50,00±9,4	
III - degrees	8		13		13	
	44,44±9,5	-	43,33±9,6	-	40,62±9,5	-
IV - degree						

Note: in the numerator – the number of patients; in the denominator - in % of the number of patients;

• -P<0.05 relative to the value before treatment; ° -P<0.05 relative to control.

After the end of treatment in the comparison group, normocenosis was established in 13 (43.33%) individuals, dysbiotic shift in 11 individuals (36.66%), and dysbiosis of the I–II stage in 6 individuals (20%). In the main group, the results of treatment using ozone were evaluated as follows: normocenosis in 17 individuals (53.12%), dysbiotic shift in 15 individuals (46.87%), absence of dysbiosis in the I-II, III and IV groups (Table 4).

The obtained results of the detection of higher titers of conditionally and pathogenic microorganisms at the end of the course of treatment in the control group are explained by the peculiarities of the microflora, the appearance of microorganisms resistant to the traditional antiseptic, which is chlorhexidine. Obviously, the use of antiseptics is fraught with the appearance of resistant forms of microorganisms, and this situation is favorable for the persistence of a chronic inflammatory process on the mucous membrane.

The applications of ozonated sesame oil were shown to be effective due to the destructive effect of ozone on the cytoplasmic membranes of microbes and bacteria, as a result, it was possible to reduce the number of opportunistic microorganisms in the main group of patients with ESF CPL SOPR, the average titers of escherichia LP decreased by 76.24%, escherichia LN - by 100%; proteus - by 57.84% and fungi of the genus candida –by 45.95% (P<0.01). Whereas in patients in the comparison group, the decrease in Escherichia coli and LN, Escherichia coli, proteus and Candida fungi was a decrease of 40.06% (P<0.01); 52.95% (P<0.01), respectively; 46.67% (P<0.01) 27.03% (P<0.01), versus 68.96% (P<0.01); 100%; 50.00 (P<0.01) and 36.12% decrease, respectively, in the control group[23.24.25].

Thus, the analysis of microbiological indicators in the main group of individuals of the ESF KPL SOPR after complex treatment with the inclusion of ozonated sesame oil without preliminary antiseptic treatment is characterized by the absence of the effect of habituation of microorganisms. As a result, the results of ozone therapy were evaluated in such a way that normocenosis was noted in 17 individuals (53.12%), a dysbiotic shift was noted in 15 (46.87%), and the absence of dysbiosis I-II, III and IV stages of patients of the main group was noted, which confirms the effectiveness of the use of ozone in the complex treatment of ESF CPL SOPR (Table 5).

Table 5. The effectiveness of ozone therapy in patients of the main group of ESF CPL in assessing the microbiocenosis of the oral cavity

Groups	**normocenosis**	**Shift**	**dysbiosis of the III degree**	**dysbiosis of the III degree**
	4 (22, 22%)	7 (38, 88%)	7 (38, 88%)	-
Control	13 (43, 33%)	11 (36, 66%)	6 (20%)	-
n=18	17 (53, 12%)	15 лиц (46, 87%)	-	-

After the end of treatment in the comparison group, normocenosis was established in 13 (43.33%) individuals, dysbiotic shift in 11 individuals (36.66%), and dysbiosis of the I–II stage in 6 individuals (20%). In the main group, the results of treatment using ozone were evaluated as follows: normocenosis in 17 individuals (53.12%), dysbiotic shift in 15 individuals (46.87%), absence of dysbiosis in the I-II, III and IV groups (Table 5).

In the main group, the use of ozonated sesame oil without preliminary antiseptic treatment with chlorhexidine is sharply distinguished by the absence of the effect of habituation of microorganisms, which provides a higher result of stabilization of the normobiocenosis of the oral cavity.

The addition of ozonated sesame oil to the complex treatment contributed to the normalization of the microbiocenosis of the oral cavity, due to its antibacterial properties, ozone contributed to a decrease in pathogenic microflora and, conversely, an increase in saprophytes.

Conclusions: Thus, the analysis of microbiological indicators in the main group of individuals of the ESF KPL SOPR after complex treatment with the inclusion of ozonated sesame oil without preliminary antiseptic treatment differs sharply in the absence of the effect of habituation of microorganisms. As a

result, the results of ozone therapy were evaluated in such a way that normocenosis was noted in 17 individuals (53.12%), a dysbiotic shift was noted in 15 (46.87%), and the absence of dysbiosis of I-II, III and IV degrees in patients of the main group was noted, which confirms the effectiveness of ozone in the complex treatment of ESF CPL SOPR.

USED LITERATURE

1. Ражабов О.А., Хайитова М.А. Клинические изменения полости рта при использование металлокерамических зубных протезов //Tibbiyotda yangi kun. - Бухоро, 2020.- №1(29)-С.322-324. (14.00.00; №22)
2. Razhabov O.A. Clinical and functional changes in the oral cavity using ceramic metal dentures //ACADEMICIA An International Multidisciplinary Research Journal, Vol. 10 Issue 2, February 2020.- Impact Factor: SJIF 2020 = 7.13 P. 209-215.
3. Ражабов О.А. Заболевания слизистой оболочки полости рта,обусловленные метолокерамическими и цирконными зубными протезами //Tibbiyotda yangi kun.-Бухоро, 2020.- № 4(33).-С.106-113. (14.00.00; №22)
4. R.O Asrorovich., A.Shodiyevich Comparative assessment of structural and functional changes in periodontal tissues during prosthetics with metal- ceramic and zirconium dentures //European Journal of molecular &Clinical Medicine" Volume 07, Issue 07, 2020.-P.583-594. (Scopus)
5. Ражабов О.А., Иноятов А.Ш., Ирсалиева Ф.Х. Клинико-Функциональные изменения полости рта при использовании металлокерамических зубных протезов //Stomatologiya. Тошкент, 2020.- № 2(2).-С.56-59. (14.00.00; №12)
6. Rajabov O.A. The State of Immune Homeostasis of the Mucosa in Prosthics with Metaloceramic and Zirconic Dental Prosthesis. //Central Asian journal of medical and natural sciences 2021.- P.367-377.
7. Otabek Rajabov, Zaynitdin Kamalov, Husnitdin Irsaliev, Fatima Irsalieva. (2021). Comparative Assessment of the Cytokine Profile in Dynamics in Patients with Orthopedic Constructions from Different Construction Materials. //*Annals of the Romanian Society for Cell Biology*, Vol. 25, Issue 4, 2021, Pages. 3197 – 3202. (Scopus)
8. Ражабов О.А. Металлокерамика ва циркон протезлардан фойдаланилганда оғиз бўшлиғидаги клиник функционал ўзгаришларнинг диагностик таҳлиллари. //Проблемы биологии и медицины Научный журнал по теоретическим и практическим проблемам биологии и медицины 2021.-№ 4 (129) (14.00.00; №19)
9. О.А.Ражабов "Сравнительная оценка цитокинового профиля в динамике у пациентов с металлокерамическими и цирконными зубными протезами"//Проблемы биологии и медицины Научный журнал по теоретическим и практическим проблемам биологии и медицины" № 5 (130) 2021г. (14.00.00; №19)
10. O.A Rajabov., A.S Inoyatov., S.S. Sobirov. Comparative assessment of structural and functional changes in periodontal tissues during prosthetics with metal-ceramic and zirconium dentures //International Journal of Progressive and Technologies 22 (2) 2020. -P.19-28.
11. Khabibova N.N. Characteristic features of free-radical processes and antioxidant protection in the oral cavity during chronic recurrent aphthous stomatitis // European Science Review. - 9-10 2018. - P. 191-193 (14.00.00; № 6).

12. 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. Impact Factor – 4,897.
13. Хабибова Н.Н. Клинико-биохимические особенности течения псевдоаллергических вариантов хронического рецидивирующего афтозного стоматита // Проблемы биологии и медицины. – 2018. - № 4(104) – С. 220-222. (14.00.00; № 19)
14. Хабибова Н.Н., Саидов А.А., Саидова М.Р. Сурункали рецидивирловчи афтозли стоматитда липидларни перекис оксидланишини ўзига хос хусусиятлари ва оғиз бўшлиғи тантиоксидант ҳимоясининг ҳолати // Тиббиётда янги кун. - №3 (23). – 2018. – С.61-63. (14.00.00; № 22)
15. Хабибова Н.Н., Ахмадалиев Н.Н. Оценка защитной системы слизистой оболочки ротовой полости при хроническом рецидивирующем афтозном стоматите // Вестник ТМА. – 2019. - №3. – С.131-133 (14.00.00; № 13).
16. Хабибова Н.Н., Хабилов Н.Л. Роль адгезивных молекул в развитие афтозного стоматита // Stomatologiya. – Ташкент, 2019. - №3. – С.32-36 (14.00.00; № 12).
17. 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. Impact factor – 0,676
18. Хабибова Н.Н., Хабилов Н.Л. Оценка сосудисто-тканевых расстройств и регионарного кровотока при хроническим рецидивирующим афтозном стоматите // Тиббиётда янги кун. - 2019. - 3(27). – С.262-266 (14.00.00; № 22).
19. 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. Impact factor – 0,676.
20. Khabibova N.N. Characteristic features of the biochemical indicators of mixed saliva in patients with chronic recurrent aphtosis stomatitis // Global Science Research Journals. - 2019. - Vol.7 (8). – P.521-526. Impact factor – 6,396.
21. Kh.Kh. Khozhiev Estimation of the effectiveness of application of the combined method of treatment of chronic uppercular periodontitis // World Bulletin of Social Sciences (WBSS) Available Online at: https://www.scholarexpress.net Vol. 3, October- 2021ISSN: 2749-361X. – P.90-96
22. H. H. Hojiev, N.N.Xabibova “Microbiological evaluation of the effectiveness of depot, apex of fluctuorization and electrophoresis in complex treatment of chronic apical periodontitis”. // Middle European Scientific Bulletin, VOLUME 4, SEPTEMBER 2020 – P. 21-25
23. H. H. Hojiev, N.N.Xabibova Improving endodontic treatment of chronic apical periodontitis with the use of depo of ipexpress and physiotherapy method of fluctuorization // International Journal on Integrated Education Volume 3, Issue IX, September 2020 – P. 224-228
24. H. H. Hojiev Effects of Treatment of Chronic Apical Periodontitis with the use of Depot-, Apex – Foresis With A Combined Method of Fluctuation // Middle European Scientific Bulletin,Volume 27, August 2022 – P. 34-36
25. Xojiev X. X. Improvement of Endodontic Treatment Methods for Chronic Periodontitis // Web of Scholars: Multidimensional Research Journal (MRJ) Volume: 01 Issue: 04 | 2022 ISNN: (2751-7543) http://innosci.org/ – P 94-98