

Aspects of Diagnostics and Treatment of Chronic Tonsillitis in Elderly and Senior Patients

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Abstract

Chronic tonsillitis (CT) in persons of elderly and senile age is characterized by a diverse clinical course and is characterized by a predominance of manifestations of common symptoms of the disease. The prevalence of complaints of the presence of a foreign body, tickling, tingling or burning sensation, dry throat, cough, rapid fatigability, weakness, lethargy, pain in joints and muscles, pain in the heart area has been established. Compared with young people, in all forms of CT, cases of angina in persons of elderly and senile age happened less seldom although a certain pattern persisted, i.e., with the deterioration in the course of CT cases of recurrence of anginas increased.

Keywords: chronic tonsillitis, elderly, senile age

Chronic tonsillitis (CT) is a chronic inflammation of the palatine tonsils with all the pathophysiological and morphological signs inherent in it, consisting in the suppression of nonspecific factors of the body's natural resistance, violation of the humoral and cellular links of immunity, which can develop after recurrent acute tonsillitis [1]. However, the development of chronic tonsillitis may be preceded by only one angina, and sometimes a history of tonsillitis may be completely absent [2].

An integral part of the pathogenesis of CT is the massive invasion of living microorganisms and their reproduction in the parenchyma, walls and lumens of the tonsils. In the parenchyma and vessels of the tonsils in healthy people, microorganisms do not exist. The constant invasion of microflora into the vessels during chemotherapy leads to constant tonsillogenic intoxication and general complications [3].

In chemotherapy, the main pathological process is played out in the tonsils with the obligatory involvement of other organs and systems of the body [4].

In the literature, all aspects of chemotherapy are mainly considered in detail in relation to children and young people. There are only a few long-standing publications devoted to the study of certain aspects of the CT problem in elderly and senile people [5].

The World Health Organization divides people's lives into the following periods: up to 18 years old - childhood, 18-44 years old - youth, 44-60 years old - middle age, 60-75 years old - old age, 75-90 years old - old age, 90+ years - long-livers [6].

Aging is a complex process involving various regulatory mechanisms that affect homeostasis, subordinate to the totality of the influence of the nervous, endocrine, immune and other systems of the body, changing throughout life to maintain the parameters of the internal environment of the body [7]. The treatment of elderly and senile patients has its own

characteristics and difficulties, which is associated with the problem of polynosology in these age groups [8].

In persons of older age groups, concomitant diseases, the "bouquet" of which occurs in many patients after 60 years, does not contribute to recovery and long-term remissions with CT [9].

Age-related changes occurring during aging affect almost all body systems - at the organ level, they reflect processes at the cellular level - gradual atrophy of organs and tissues, growth of connective tissue, suppression of the functions of organs, their reserves and adaptation [10].

The development of pathology is the result of the interaction of the pathogenic principle and the body's defense mechanisms. With age, the effectiveness of defense mechanisms decreases, leading to an increased sensitivity of the aging population to infections. The specificity of the course of the infectious process also changes, which includes the slow development of the pathological process (latent course, asymptomaticity), the rapid depletion of physiological systems and defense mechanisms causes a tendency to relapse, the transition of acute forms to chronic forms, an increase in complications, to the late onset of the treatment effect [11].

Relapses of sore throats with age become less common, while local and general symptoms of CT persist. Structural and functional features of the lymphadenoid apparatus in elderly and senile people explain this pattern. Tonsils in elderly people are reduced in size, the number of follicles is sharply reduced, lymphadenoid tissue is atrophied and, often, replaced by connective tissue, lacunas are small, collapsed [12].

However, the reactions of cellular immunity and the formation of anti-infectious resistance of the cell type at various stages of the development of infection occur in the tonsils throughout life and are not lost by old age [13]. In a number of patients of older age groups, after long-term remission, chemotherapy is exacerbated, proceeding with a pronounced clinical picture of angina, severe course and frequent paratonsillar complications. Conservative therapy in the elderly is not as effective as in young people, and surgical treatment is usually excluded.

Based on the low functional activity of the immune system in old age, the use of agents that affect its activity is associated with many problems, in particular, the limitation of the use of immunocorrectors in these age groups [14].

In this regard, it is promising to correct changes in nonspecific factors of the organism's resistance, in particular, the adaptive reactions of the organism [15]. This, in turn, will allow us to propose means aimed at correcting pathological types of adaptive reactions.

Literary sources do not reflect the results of the state of nonspecific resistance, in particular, the adaptive reactions of the body in elderly and senile patients with CT. Its study is of great interest given the peculiarities of the functioning of the immune system in old and senile age.

These and other contradictory scientific and practical aspects of the CT problem in older age groups require in-depth research in terms of revealing the features of the clinical course, identifying endo- and exogenous predisposing factors. All this will ultimately serve as a pathogenetic rationale for the development of conservative methods of treatment of chemotherapy in elderly and senile patients.

The above scientific prerequisites determined the goal of the study - to study the features of the clinical course of chronic tonsillitis in elderly and senile people, taking into account the

degree of intoxication and adaptive reactions of the body, to develop and evaluate the effectiveness of the method of conservative treatment.

Material and research methods.

For the period from 2005 to 2017, 131 elderly and senile CT patients were examined. 96 patients with chemotherapy were included in the main group and their age ranged from 61 to 83 years (mean age 67.5 ± 2.5 years). Among them there were 66 women and 30 men. The age of men in the main group was within 61–78 years (average age - 63.8 ± 2.9 years), women - 61–83 years (average age - 71.0 ± 1.5 years).

The comparison group included 35 CT patients aged 25–45 years (mean age 32.2 ± 2.6 years), who excluded concomitant and concomitant diseases. Among them there were 16 men (45.7%), women - 19 (54.3%).

20 practically healthy elderly and senile people (who did not suffer from acute respiratory infections for 3 or more months before the examination), the average age of which was determined as 68.1 ± 1.99 years with extreme values from 61 to 83 years old, constituted the control group.

The distribution of patients in the main group, taking into account age and shape, is presented in Table 1.

Table 1.
Distribution of various forms of chronic tonsillitis, taking into account gender and age groups in elderly and senile patients

Age groups	Total		CTSF		CTTAF I degree		CTTAF II degree	
	man.	women.	man.	women.	man.	women.	man.	women.
60 – 74	23	32	11	17	8	12	4	3
75 – 90	17	24	12	16	3	6	2	2
Total	40	56	23	33	11	18	6	5

As can be seen from the table, CT of the simple form (CTPF) (58.3%), CT of the toxic-allergic form of CTTAF I (30.2%) and, lastly, CTTAF II (11.5%) degree were most often detected. No significant difference was found in the percentage between both age groups, men and women.

CTPF was detected in 29 (45.7%) patients of the comparison group, 21 (31.4%) - grade I CTTA and in 14 (22.9%) - grade II.

CTPF in both groups was more frequent, followed by grade I CTTAF and, less frequently, grade II CTTAF. The detection rate of CTPF was higher in the main group, the occurrence of grade I CTTAF was approximately the same, and grade II CTTAF was more common in the comparison group. Based on the results obtained, it can be concluded that the structure of the occurrence of various forms of chemotherapy has changed in the age aspect. Perhaps this is due to the fact that, in previous age periods, in elderly and senile patients, CTPF remained unrecognized or formed against the background of diseases caused by age-related anatomical and physiological changes (gastroesophageal reflux, chronic pharyngitis, chronic generalized periodontal disease,

etc.).

Various concomitant diseases were revealed in 49.5% of patients in the main group. Among the somatic diseases, diseases of the cardiovascular, respiratory, nervous and digestive systems prevailed. Of the diseases of the ENT organs, with a separation from the rest, chronic atrophic pharyngitis, chronic catarrhal rhinitis, and sensorineural hearing loss were more common.

Patients included in the main group, taking into account the presence or absence of concomitant and associated diseases, were divided into 2 groups. Group I included 36 (37.5%) persons who did not have any diseases of other organs and systems. Group II included 60 (62.5%) patients with diseases of other organs. Of the total number of patients in group II, 31 (51.7%) had three or more, 17 (28.3%) had two, and only 12 (20%) had one concomitant disease.

The general clinical examination began with an assessment of the patient's feelings (complaints), collection of an anamnesis of life and illness, and analysis of medical records.

Comparison of previously transferred sore throats with the form of CT showed the following: with CTPF, angina was noted once a year in 10.8%, two and three times - in 4%; with CTTAF grade I, there were cases of angina once a year - in 3.9%, two and three times - in 12.9%, four or more - in 5.1%; with CTTAF grade II, episodes of angina occurred once a year - in 1%, two and three times - in 10.2%, four and more - in 17.9%. It is obvious that a certain pattern is being built, ie, with the deterioration of the course of CT, the cases of recurrence of angina increased, which is consistent with the literature data [16] (Table 2)

Table2.
The number of episodes of angina depending on the forms of CT (%)

Groups	Number of episodes of angina				
	Did not have	Once a year	2-3 times a year	4 or more times a year	Total
Main (n = 96)	80,3	12,5	5,3	2,1	19,7
CTPF(n=61)	85,2	10,8	4,0	-	14,8
CTTAF I (n=24)	83,1	3,9	12,9	5,1	21,9
CTTAF II (n=11)	70,1	1,0	10,2	17,9	29,1
Comparisons (n = 35)	22,8	22,2	44,1	10,9	77,2
CTPF(n=16)	24,2	44,3	26,1	5,4	75,8
CTTAF I degree (n = 11)	3,5	5,5	60,9	30,1	96,5
CTTAF II degree (n = 8)	0	2,2	44,7	53,1	100

The clinical examination included an assessment of the condition of the skin, visible mucous membranes, musculoskeletal system, nervous system, internal organs, and ECG.

The condition of the ENT organs was assessed using otoscopy, rhinoscopy, oropharyngoscopy.

Compulsory laboratory diagnostics included a general clinical analysis of peripheral blood (the number of erythrocytes and leukocytes, hemoglobin, ESR, hemogram counting reticulocytes, platelets, basophils, eosinophils, stab leukocytes, segmented urine cells, lymphocytes),

monocytes.

Нами для лабораторной оценки проявлений интоксикации организма применены ЛИИ, ГПИ.

ЛИИ определяли по формуле предложенной Я.Я. Кальф-Калифом в модификации по В.К. Островскому и Ю.М. Свитичу:

$$\text{ЛИИ} = \text{Пл} + \text{Ми} + \text{Ю} + \text{П} + \text{С} / \text{Л} + \text{Мо} + \text{Э} + \text{Б}$$

где Ми – миелоциты, Ю – юные клетки, П – палочкоядерные нейтрофилы, С – сегментоядерные нейтрофилы, Пл – -плазматические клетки, Мо – моноциты, Л – лимфоциты, Э – эозинофилы и Б – базофилы.

В норме показатель ЛИИ составляет $1,6 \pm 0,5$.

ГПИ определяли по формуле предложенной В.С. Васильевым и В.И. Комаром:

$$\text{ГПИ} = \text{ЛИИ} * \text{Кл} * \text{Кс}$$

где, ЛИИ- лейкоцитарный индекс интоксикации

Кл - поправочный коэффициент на лейкоцитоз

Кс - поправочный коэффициент на СОЭ

В норме показатель ГПИ равен $0,62 \pm 0,086$

The bacteriological study was carried out in a bacteriological laboratory. A swab from the surface of the tonsil and posterior pharyngeal wall was performed with two separate sterile cotton swabs.

The type of adaptive response was determined based on the analysis of the leukocyte blood count according to the recommendations of L.Kh. Harkavi et al.

The type of adaptive response is determined primarily by the percentage of lymphocytes in the leukocyte formula. The rest of the blood cells included in the leukocyte formula and the total number of leukocytes testify to the degree of the reaction's usefulness, the degree of its intensity and attitude to the generally accepted boundaries of the norm. For different types of adaptive response, there were certain changes in the indices of blood corpuscles (Table 3).

Table3

The limits of fluctuations in the indicators of the uniform leukocyte formula and the total number of leukocytes, with various types of adaptive reactions

Name of blood elements	Type of adaptive response and fluctuation limits in%					
	PT	PA		PC	PXC	ПП
		PCA	ППА			
Lymphocytes	21-27	28-33	33-45	<20	<20	>40-45
Segmented neutrophils	The upper half of the normal zone	lower half of the normal zone	below normal	higher	higher	below normal
Rod neutrophils	norm	norm	norm	norms	norms	norm
Eosinophils	norm	norm	norm	norm and higher	norm and higher	norm

Monocytes	norm	norm	norm	0	different vibrations	norm
Basophils	norm	norm	norm	norm and higher	norm	norm
Total leukocyte count	norm	$4,0-8,0 \times 10^9$	$4,0-8,0 \times 10^9$	$8,0 \times 10^9$	norm	$4,0-8,0 \times 10^9$

The course of conservative treatment included:

- local effect on the pathological focus - washing the lacunae of the tonsils. In the majority of patients, treatment was started with the use of the drug JOKS solution at a dilution of 1:60. In patients with individual intolerance to iodine, in the case of side effects, in the presence of diseases limiting the use of drugs containing this chemical element, instead of JOKS solution, Eludril solution was used. Treatment of the surface of the palatine tonsils, the posterior wall of the oropharynx with Lugol's solution was performed according to indications.

Additionally prescribed for 10 days:

- Ascorutin 1 tablet 3 times a day for 7 days;
- diazolin 0.1 gr. 1 tablet 2 times a day for 7 days;

The criterion for the effectiveness of treatment was:

1. Regression or disappearance of local signs of CT;
2. Disappearance of general signs of the disease (tonsillogenic intoxication - weakness, weakness, malaise, fatigue, etc.);
3. Positive dynamics of the course of concomitant and associated diseases;
4. Positive dynamics of the results of laboratory and instrumental research.

Research results

In general, the indicators of the general detailed blood test did not undergo significant changes, although 9 patients with CTAF of the II degree of the main group had moderate leukocytosis (up to $14 \times 10^9 / l$), an increase in the proportion of lymphocytes (up to 61%), an increase in ESR (up to 25 mm / hour).). Considering the relatively low specific weight of grade II CTAF in the CT structure, these changes did not affect the overall indicators.

In the general analysis of urine in 4 patients with CTAF of the II degree, an increase in the protein content was revealed, combined with the appearance of leukocytes in a moderate amount. In general, the indicators of the general detailed analysis of urine also did not differ from the norm.

In patients with CT, mainly pathogenic, then opportunistic microorganisms, rarely saprophytic microorganisms with low CFU, were inoculated. The results of the study below show a case of detecting pathogenic microorganisms and opportunistic flora with CFU higher than the standard values.

When examining smears taken from the posterior pharyngeal wall, microflora was inoculated in all patients and 11 healthy individuals. 1 healthy subject had no microbial growth. In patients of the main group, in 30.9% of cases, there was an association of microbes. In the

comparison group, this was established by 37.3%

The microbiological "landscape" of the surface of the palatine tonsils of patients with CT was characterized by the fact that, in contrast to the study of the surface of the posterior pharyngeal wall, when examining the surface of the palatine tonsils, all, including healthy individuals, had microflora inoculated. Although, the species composition should be indicated, and the presence of an association of microbes did not differ significantly (the latter in the main group in 37.3%, in the comparison group - 44.1%).

The LII index in 73% of CTPF patients was within the control values and in 20% of cases it was not significantly changed compared to the norm. Only in 7% of patients it significantly differed from the control group ($P < 0.01$).

In 50% of patients with HTTAF grade I, the LII index did not go beyond the normal fluctuations. In 35% of patients, LII and GPI differed from the indicators of the control group, but their degree of reliability was statistically insignificant ($P > 0.1$). A significant change in comparison with the norm in the parameters of the studied methods was noted in 15% of patients ($P > 0.1$).

The greatest shifts in the values of both research methods were noted in grade II CTTAF. In 25% of patients, LII and GPI indices did not differ from the values of the control group. In 35% of cases, they differed from the indicators of the control group, but its degree of reliability was statistically insignificant ($P > 0.1$). In 40% of patients with HTTAF grade II, the LII and GPI indices had a significant difference from the values of the control group.

In general, in patients with CT, leukogram indices vary over a wide range. The proportion of neutrophilic leukocytes covered the area from moderate neutropenia to neutrophilic leukocytosis. The percentage of lymphocytes varied from the level of relative lymphocytopenia to lymphocytosis. A number of patients had eosinophilia. The absolute number of leukocytes ranged from 5.1 to $13.8 \cdot 10^9 / l$. The diversity of the data obtained was expressed by the identification of various adaptive reactions of the body in the examined patients.

Analysis of the results, taking into account the duration of the disease, showed that the frequency of occurrence of the pathological type of adaptation reaction, i.e. RHS significantly increased with increasing severity of the disease. The greatest changes in the type of adaptation reaction were observed in persons with grade II CTTAF, i.e. all showed changes in the initial indicators of the adaptive response of the organism in various variants. So, with CTPF, RHS was found only in 1 (3.3%) patient, for CTTAF grade I - 3 (9.9%), CTTAF grade II - 5 (16.6%). The opposite picture was observed in relation to the occurrence of RT, i.e. 6 (20.0%), 1 (3.3%), respectively, grade II CTTAF did not occur. RA was most often recorded with CTTAF grade I (in 9 cases, which is 30% of the total number of patients examined).

In the body of patients with CT, a number of complex adaptive processes develop, which, in particular, are reflected by a change in leukogram indicators. These changes allow maintaining the required level of non-specific resistance of the organism. However, in a number of patients with an unfavorable course of chemotherapy, nonspecific resistance is reduced, which is manifested by a pathological adaptive reaction - RHS, or the limiting stress of a normal adaptive reaction - RA, expressed as RPA.

It was found that with clinically unfavorable forms of the course of CTTAF I and II degrees, an increase in the proportion of lymphocytes and eosinophils is observed. This is especially evident in patients with CT, toxic-allergic grade II. The incidence of pathological adaptive reactions in patients of the third group was statistically significant in relation to patients in the first group ($P < 0.05$).

The analysis of changes in the adaptive response of the body in 45 patients with CT (19 patients with simple and 26 patients with toxic-allergic form I degree) in the course of conservative treatment. We have observed 3 types of changes in adaptation states. The first type (28 patients) was characterized by the fact that at the beginning of treatment there was a change in the initial adaptive response to RT, which persisted throughout the entire period of treatment. In the second type (11 patients), there was an alternation throughout the entire period of treatment of pathological adaptive reactions with RT. In the third type (6 patients), by the middle of the beginning of follow-up, the initial adaptive response was replaced by RHS. The change of RHS to physiological adaptive reactions - RT or RA was observed only in 1/3 of patients.

In patients with the first type, a more favorable course of chemotherapy was observed and the effectiveness of the therapy was higher than in patients with the other two types ($P < 0.05$). These data testify to the physiological desirability of the first type of adaptive reactions. In patients with a simple form of CT, the first type of adaptation states was observed in 79.4%, the second type was observed in 17.2%, and the third type was observed in 3.4%. Among patients with CT, a toxic-allergic form of I degree, the first type of adaptation reactions was found in 27.6%, the second type - in 60.7% and the third type in 11.7% of cases.

Complaints that characterize the local manifestations of chemotherapy - pain, tingling sensation, and the presence of an unpleasant odor from the mouth - disappeared after 1-2 courses of treatment. Regression or complete disappearance of other complaints - a feeling of a foreign body, soreness, burning, dry throat, cough was ambiguous and depended on the presence of concomitant diseases. The most inert picture in this regard was observed in the presence of one of the forms of chronic pharyngitis (especially its atrophic form), chronic periodontitis, atrophic gastritis, in the presence of a tendency to constipation. When chemotherapy was combined with chronic bronchitis, coronary artery disease, the presence of cough and its severity also depended on their course. Considering the high proportion of atrophic forms of chronic pharyngitis and periodontal disease among the examined patients, complaints associated with them were detected in most cases until the end of the entire treatment, and in 1/10 they were observed during dispensary observation.

Of the 96 patients in the main group, 77 (80.3%) denied having had an episode of angina over the past 10 years. Of these, 12 (12.5%) had angina recurrence 1 time, 5 - (5.2%) two or three, and 2 (2.1%) - four or more times a year. During the observation period in all 77 patients without the presence of an episode of angina in the history of CT development, this was not noted. In the first year of observation, episodes of angina were observed in only 9 cases, which amounted to 10.6% of the total number of patients ($N = 85$), who were included in the development at the stage of evaluating the results of CT treatment. Of these, 7 (8.2%) had angina recurring 1 time, 2 - (2.4%) twice a year during therapy. By the end of treatment, an episode of angina occurred in 2

patients and in both patients once. Of the 7 patients who had a single episode of angina per year, 5 had grade II CTTAF, 2 - grade I CTTAF. Two patients with an episode of angina 2 times a year had CTTAF of the II degree. This form of CT was also in 2 patients, with recurrence of angina in the second year of treatment.

Against the background of the conservative treatment, during the first three months, a decrease in complaints of pain and discomfort in the pharynx, the disappearance of the feeling of a lump in the throat, and an improvement in general well-being were observed. The dynamics of the pharyngoscopic picture was as follows - after the course, the palatine tonsils became pale, in some cases whitish, the depth of the lacunae decreased, congestive hyperemia of the palatine arches occurred in 30% of patients, the absence of contents in the palatine tonsils in the first three months was observed in 87% of patients. Repeated complaints of discomfort in the throat, renewal of bad breath occurred closer to six months, deterioration of the pharyngoscopic picture was noted after 5–6 months in 23% of patients. From which a preliminary conclusion was made about the need to repeat courses of conservative treatment on a quarterly basis.

Recovery of GPI and LII to control values in 60% of individuals correlated with clinical manifestations of intoxication of the body, in 31% it was ahead and in 20% came later. It should be noted that the recovery to the norm of the indicators of the research methods we used in the dynamics of treatment occurred at different times. Although, in the course of treatment, the recovery of GPI lagged slightly behind LII, the difference was statistically insignificant. However, this fact confirms the higher sensitivity of the GUI in determining the subclinical manifestations of intoxication and determines its more significant diagnostic value.

By the end of treatment, only physiological types of adaptive reactions were encountered in patients with CTPF. In patients with HTTAF grade I, there was also a similar trend. Of the patients with CTTAF II degree who initially had type RHS, in 1/3 of cases it persisted and by the end of treatment and in the rest it was replaced by MS, and also significantly decreased in relation to the initial, pathological borderline variant of the normal adaptive response - RPA.

In patients with the first type, a more favorable course of chemotherapy was observed and the effectiveness of the therapy was higher than in patients with the other two types ($P < 0.05$). These data testify to the physiological desirability of the first type of adaptive reactions. In patients with a simple form of CT, the first type of adaptation states was observed in 79.4%, the second type was observed in 17.2%, and the third type was observed in 3.4%. Among patients with CT, toxic-allergic form I degree, the first type of adaptive reactions was found in 27.6%, the second type - in 60.7% and the third type in 11.7% of cases.

The end result of the treatment was assessed by the end of the dispensary observation according to the following gradation:

- clinical recovery, when no exacerbations of CT were observed during the 3-year dispensary observation, there was a pronounced positive dynamics of concomitant and / or concomitant diseases (if any), there was no pathological discharge in the gaps of the palatine tonsils and the values of the general blood test were within the control values.

- clinical improvement, i.e., there was a single exacerbation of chemotherapy for 3 years, there was a positive dynamics of concomitant and / or associated diseases, in the lacunae of the

palatine tonsils, single caseous plugs could be detected and indicators of a general blood test were within the control values.

- the course of chemotherapy with a clinical positive shift, when there were annually single exacerbations of the disease for 3 years, during concomitant and concomitant diseases there was a tendency to improve, in the lacunae of the palatine tonsils, single caseous and purulent plugs could be detected, indicators of a general blood test were in within the control values.

- no change - the indicators of all the evaluated criteria did not change or decreased by less than 30% compared to the initial state, the recovery of all the studied indicators had a significant difference from the control values;

- deterioration - negative dynamics of clinical manifestations, significant deterioration of the digital values of all studied parameters.

The final results and the average duration of treatment of patients with chemotherapy are shown in Table 4.

Table 4
The end result of treatment of patients with chemotherapy

Criteria	Main (n = 96)		Comparisons n = 35
	I (n=36)	II (n=60)	
Clinical recovery	32 (88,9%)	44 (73,3%)	24 (68,6%)
	76 (79,1%)		
Clinical improvement	4 (11,1%)	16 (24,7%)	11 (31,4%)
	20 (20,9%)		
Without change	—	—	—
Deterioration	—	—	—
Total duration of treatment to achieve the effect (in months)	11,1±0,18*	18,3±1,11	23,7±1,02
	15,2±0,17*		
The number of courses of treatment carried out to achieve the effect	2,7±0,3*	3,7±0,1*	7,3±0,5
	3,3±0,2*		

Note. * - P <0.05 in relation to the comparison group.

Conclusion. Conservative treatment by the proposed method can be considered quite effective, providing a long-term remission of the disease and considered the method of choice in people of older age groups.

Based on the study, the following conclusions should be drawn:

1. Conservative treatment of chemotherapy in elderly and senile patients should be carried out in a comprehensive manner, and its important link is local sanitation by washing the lacunae of the tonsils with an antiseptic solution.

2. Achieving the clinical effect of the therapy depends on the form of the disease and the presence of concomitant diseases, and in this regard, CTPF is a more favorable state in the absence of pathology from other organs and systems of the body.

3. Remediation of the focus of infection had a beneficial effect on the restoration of nonspecific resistance of the organism, which is reflected in the significant predominance of physiological adaptive reactions after treatment of individuals.

4. Conservative treatment of chemotherapy in elderly and senile patients is an effective method that allows the majority of patients to achieve clinical recovery, the rest - clinical improvement.

5. The total duration of treatment in PSV patients, especially in the absence of concomitant diseases, is reliably shorter than in middle-aged people, but requires quarterly repetition.

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