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Principles of Organization of Dental Care for Military Personnel

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Abstract In patients with dental diseases, a decrease in the local defense mechanism in the oral mucosa, especially in combination with diabetes mellitus, during bacteriological studies, a high level of Candida albicans fungi is detected, which is a negative factor in the course of chronic recurrent periodontitis due to the production of the carcinogenic compound N-nitro-benzyl-methylamine. The oral cavity has a local immune mechanism that protects against infection, and in addition, it has a general immunity that protects the organs and tissues of the body. The effectiveness of local protection depends entirely on the following factors: the integrity of the oral mucosa, the state of the lymphoid system, as well as borderline conditions and changes in lymphoid tissues that form a predisposition to certain diseases and pathological conditions, humoral - the level of IgA, IgM, IgG, lactoferrin, and other protective factors.

Keywords Dental diseases, Tooth, Oral cavity, Diagnosis, Military

1. Introduction

The inflammatory process in dental diseases is a finely controlled balance of pro-inflammatory and anti-inflammatory cytokines that neutralize negative factors of the stimuli. The secretion of these cytokines is a short process triggered by certain genetically determined receptors. There is no correlation between the amount of cytokines in the oral fluid and their levels in the blood, which once again demonstrates the autonomy of the local immune regime in the oral fluid. According to modern research, the cause of the development of chronic recurrent periodontitis is circulatory disorders, a decrease in the body's immune defenses, chronic diseases of the gastrointestinal tract, diseases of the cardiovascular system, and diseases of the pancreas, which lead to the development of stressful situations. Intestinal dysbacteriosis leads to an imbalance of the resident microflora, as a result of which the antagonistic activity of pathogenic microorganisms is formed, which, in turn, creates conditions for the development of allergic reactions of the delayed hypersensitivity type [4,5,8].

2. Method of Using the Device

The first stage of our study was to determine the clinical manifestations of the frequency of inflammatory processes in the tissues of the oral cavity in military personnel with dental diseases, to collect complaints, clinical signs, and anamnesis of military personnel. At this stage, we determined the biochemical blood test of military personnel during the study [3,5].

The second stage of our study included methods for studying the frequency of destructive-inflammatory processes in the tissues of the oral cavity in military personnel with dental diseases [2].

The third stage of our study was to determine the most important periodontometric study for military personnel, which included general and clinically significant examinations of periodontal tissue [8].

The fourth stage of our study was to introduce the immunological research base of individual causes included in the diagnostic modules [6,7].

In the fifth stage of our research - we carried out the diagnosis of destructive-inflammatory processes in the tissues of the oral cavity in soldiers with dental diseases, we implemented medical preventive measures [4,8].

3. Method of Conducting an Abacterial Environment

The diagnostic method developed by us in the course of our research is suitable for the personal lifestyle of military personnel in the conduct of destructive-inflammatory processes in the tissues of the oral cavity in military personnel with dental diseases.

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Inflammatory processes in the tissues of the oral cavity in military personnel with dental diseases are a serious health problem. The prevalence of inflammatory processes is high throughout the world, which is dominated by the following factors: an increase in the incidence of periodontal inflammation; inflammatory processes affect any military personnel and only worsen over time. A significant deterioration in the quality of life of military personnel is a difficult process for the military and his family. Timely clinical diagnosis of destructive-inflammatory processes in the tissues of the oral cavity in military personnel with dental diseases and the development of qualified methods for identifying oral diseases are of particular importance. In the case of polysensitization, inflammatory processes and subsequent rapid development in our military, early detection of the disease is especially important in this regard [5,6].

Examination of inflammation in the tissues of the oral cavity in military personnel with dental diseases is a multi-stage process, in which the main criterion is the history of the disease, the first step is to thoroughly explain the complaints of the military personnel and describe the nature of the disease. In recent years, domestic and foreign researchers have been conducting a lot of research on the clinical, immunological, medical and social aspects of oral diseases in military personnel, the intensity of the spread and formation of these diseases in the military, various treatment methods, and prevention of complications. The results obtained in the development of new methods for diagnosing inflammatory processes in the tissues of the oral cavity in the military have made it possible to identify risk factors leading to these pathological factors, including allergic diseases, including various factors of the diagnosis of oral diseases in the military. At the same time, there are many problems waiting to be solved, and this chapter of the dissertation presents an analysis of the results of studying the solution of medical and social issues of inflammatory processes in the tissues of the oral cavity in the military, depending on their place of residence [8,9].

A comprehensive, conceptual approach to the study of the development and progression of inflammation in the oral cavity in servicemen with dental diseases during service has not yet been developed. In addition, unfortunately, there are few comprehensive studies on the prevalence and age-related incidence of inflammation in the oral cavity among servicemen who regularly serve on the borders of our republic [5,7].

There are few studies on the prevalence of these diseases, comprehensive studies on the clinical, immunobiological, medical and social aspects of inflammation in the oral cavity in servicemen, although studies in this area provide complete information about the risk factors of the disease, their impact, the specific features of the course of inflammation in the oral cavity in servicemen, the current state of medical care for oral diseases, and create the basis for the development of various effective measures for early diagnosis, treatment, prevention and rehabilitation [2,8].

In this regard, one of the urgent problems is research on a conceptual approach to the complex clinical-laboratory, medical-social study of inflammations in the tissues of the oral cavity among military personnel living in the conditions of our Republic, as well as the development of new criteria for early diagnosis, determining the course and prognosis of their consequences.

It should be noted that in the process of familiarizing with scientific sources and reviewing them, few scientific sources were found that were conducted and published on the prospects for the socio-psychological adaptation of military personnel suffering from inflammation of the oral cavity tissues in society. The complex pathogenetic mechanisms underlying the formation, development and course of various oral diseases, as well as the effective and timely control of inflammation of the oral cavity tissues, determine the treatment regimen, which should include not only the emotional state and quality of life of the military, but also the members of his family [1,5,7].

The above conditions cannot be achieved without the development and implementation of effective training programs that help form cooperation between the doctor and the military, without which the treatment tactics developed by the doctor for the military will not be successful. Available scientific data indicate that there are no comprehensive programs for the prevention of exacerbation and severity of inflammation in the oral cavity tissues of military personnel with dental diseases, including psychological rehabilitation, and long-term monitoring of military personnel for oral diseases, and the measures implemented in polyclinics do not fully meet today's requirements. Taking into account the above, medical and social studies were conducted to solve the problem of long-term monitoring of inflammation in the oral cavity tissues of military personnel with dental diseases [2,3].

As is known, the role of medical statistics in the organization, conduct, interpretation and analysis of medical and social research is invaluable, as well as the randomization of studies, the representativeness of research groups to each other. It is shown that the principles of evidence-based medicine are at the heart of them.

As is known, statistics is a science that studies the quantitative changes in phenomena occurring in society in relation to their qualitative changes. The reliability, validity, reasonableness of all conclusions, and the representativeness of groups to each other in the case of randomized studies depend mainly on the statistical processing of the collected clinical or experimental material [Ilyasov F.I., 2011; Mamatkulov B.M., 2013]. Methods for statistical processing include the selection of modern computer programs, the construction of variational series, the determination of the level of reliability, and the use of correlation methods. Its main purpose is to study the magnitude and quantitative changes of events occurring in society in certain regions over a specific period of time, in connection with the laws of their origin [5,6,8].

Medical statistics studies all events in human activity in connection with their social life. No process in the human body occurs without the influence of the social environment. This applies not only to indicators such as illness, death, injury, disability, physical development, which are directly

related to the biological and social environment, but also to all reactions in the human body that occur under the positive and negative influence of the external environment, and the socio-medical research carried out in the dissertation is no exception [2,3,7].

Any statistical research is based on a single scheme and consists of the same statistical stages, consisting of 4 successive stages [Mamatkulov B.M., 2013]:

Stage 1 - drawing up a research plan and program (the results of the research depend on the fact that it is carried out on the basis of a clearly defined plan and program drawn up in advance;

Stage 2 - collecting and monitoring statistical data;

Stage 3 - grouping, summarizing and calculating the obtained statistical data;

Stage 4 - statistical analysis, drawing conclusions and applying them in practice.

The purpose of the research is to optimize and improve integrated approaches in the conducted research, organize long-term monitoring of inflammation in the tissues of the oral cavity in military personnel with dental diseases, conduct a thorough study of the long-term results of the effectiveness of treatment and prevention, and provide them with training in oral diseases in order to improve their knowledge and skills in oral diseases. A treatment and prevention algorithm was developed [3,5].

Specialists from other fields were also involved for the military personnel belonging to this contingent. Since the tightness of working hours in the military is accompanied by deep psychological disorders at that time. Organizational and methodological: formation of a data bank on new traditional and non-traditional methods of preventing inflammation of the oral cavity tissues in military personnel with dental diseases, organization of education on oral diseases for military personnel, distribution of various handouts on inflammation of the oral cavity tissues to military personnel;

Cultural - educational: holding mass events and campaigns, organizing visits to various entertainment events, holding competitions, concerts, theatrical performances;

Treatment - preventive: organizing training sessions on attracting medical specialists to treat and rehabilitate inflammation in the oral cavity tissues of military personnel with dental diseases, processing documents for treatment in a sanatorium-resort;

Psychological: conducting seminars and trainings for military personnel, forming psychological support groups for military personnel (of all age groups), daily analysis of work on psychological rehabilitation of the entire family;

Medical - social: organizing contacts with social services, forming a fund of medicines at the expense of voluntary donations, organizing the receipt and delivery of disease peak meters;

Information support: registering and accounting for military personnel with dental diseases; informing about mass events; Interaction with the hospital's dental service, administration, and media, creation of a Telegram channel and monitoring its ongoing activities [1,5,8,9].

4. Conclusions

Thus, in order to study inflammation in the oral tissues of military personnel with dental diseases living in the conditions of our Republic, it was determined that it is necessary to conduct large-scale medical and social studies in order to improve the principles of primary prevention, based on them, the basics of medical statistics, randomized studies, the formation of representative groups, and the principles of evidence-based medicine should be mastered. In order to optimize the integrated approach in research, organize long-term monitoring of military personnel with inflammatory-destructive diseases of the oral cavity, study the long-term results of the effectiveness of treatment and prevention, and increase their knowledge and skills on these diseases, a proposed program for military personnel with dental diseases was organized, a system for organizing the activities and directions of this club was developed, which was determined to consist of the following parts: organizational - methodological; cultural - educational; therapeutic - preventive; psychological; medical - social; information support.

The examination of the soldiers began with a study of their general condition, skin color, palpation of local lymph nodes. An examination of the oral cavity was conducted to assess the condition of the teeth [4,6,7].

We examined the condition of the lips, cheeks, mucous membrane of the tongue, the presence of teeth marks or bite marks, the connection of the frenulums and cords, the depth of the vestibule of the oral cavity, determined the condition of the gingival margin (color, shape, presence of edema, fistulas, abscesses), determined the presence of mineralized and non-mineralized supragingival and subgingival deposits, determined the presence and depth of periodontal pockets, and the presence of exudation [5].

The dental card of the soldier contains a dental formula, which records carious and non-carious lesions, the presence of fillings, orthopedic structures, and extracted teeth [3,6,8].

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