World Bulletin of Social Sciences (WBSS)
Available Online at: https://www.scholarexpress.net
Vol. 16, November,2022
ISSN: 2749-361X

IMPROVING THE TREATMENT OF PHLEGMON OF THE MAXILLOFACIAL REGION

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Article history:

Received: September 24th 2022
Accepted: October 26th 2022
Published: November 30th 2022

Abstract:

Overweight people suffer diseases worse than people without pathology. More than half (54.1%) of patients with FSLD are overweight or obese, with a male to female ratio of 1.8:1. In 6.7% of cases of FCLO, there is a lack of body weight.

Keywords: overweight people, phlegmon, patients, diseases, metabolic syndrome, maxillofacial area

Phlegmon - acute diffuse purulent inflammation of the cellular spaces; unlike an abscess, it does not have clear boundaries. The most common cause of the development of phlegmon can serve as a chronic infection of the teeth, tonsils, foreign body. The clinical picture is manifested by a deterioration in general well-being, a rise in temperature. With a shallow phlegmon, a sharp asymmetry of the face occurs, the natural folds of the face are smoothed out, the skin over the infiltrate is glossy, hyperemic, and does not gather into a fold. With phlegmon of the floor of the mouth, tongue and peripharyngeal leading symptom is the increasing difficulty in breathing, eating, speech, which leads patients into a state of fright, fear. High intoxication can cause a disorder of cardiac activity and consciousness. Involvement of masticatory muscles in inflammation causes the development of their contracture.

The number of patients with severe phlegmon of the face and neck increases from year to year, which leads to an increase in temporary disability, and in severe cases leads to death. In recent years, the proportion of patients with HL of the maxillary lobe is 40-50% of the number of patients in hospitals, there has been a steady increase in the number of phlegmons that are not amenable to traditional methods of treatment, and the frequency of life-threatening complications in patients has increased: sepsis, mediastinitis, sinus thrombosis. At present, in practical healthcare, the tactics of treating purulent wounds is based on the principle of sequential wound treatment, taking into account the phase of the wound process. The management of a purulent wound includes surgical treatment with further covering of the wound surface with a gauze bandage with drugs.

One of the most important components, despite the large number of works devoted to the surgical treatment of phlegmon of the face and neck, many problems of postoperative treatment remain unresolved. Good results in the treatment of patients with phlegmon of the face and neck depend not only on surgical, but also on subsequent local adequate treatment of a purulent wound.

The actual problem of modern dentistry today is the problem of the influence of systemic disorders characteristic of the metabolic syndrome (MS) on the organs and tissues of the oral cavity. The prevalence of MS in industrialized countries is 10-20%, in the USA - 25% (among the population over 30) (Ford E.S., 2012). In the Russian Federation, according to the WHO MONICA project, among men and women aged 25-64, 39.5% have 2 or more MS criteria, 3 or more criteria are noted in 10.7% (Nikitin Yu.P. et al., 2011). Despite a significant number of studies, the pathogenetic relationships between purulent-inflammatory processes in the maxillofacial area, metabolic disorders, dysbiosis of the digestive tract and cardiovascular pathology have not been fully elucidated. Metabolic syndrome (MS) is also an important medical and social problem worldwide. According to the WHO, the number of patients with insulin resistance syndrome, who have a significant risk of developing type 2 diabetes, in Europe is approaching 40-60 million people (Shishkin A.N. et al., 2007). In 1988 Reaven G.M. suggested that all these disorders are connected by a single origin and pointed out that MS is a clinical symptom complex for identifying individuals with a higher risk of developing cardiovascular diseases (Reaven G.M., Lithell H., 2016).

At the moment, the relationship between pathological changes in the maxillofacial region and general somatic disorders in MS has not been fully studied.

All of the above justifies the relevance of this topic and determines the need for this study. The development of methods for early diagnosis and timely correction of these disorders is of high relevance, which is necessary for the effective treatment of patients with comorbidities.

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DIAGNOSTIC METHODS

The prevalence of acute odontogenic inflammatory diseases of the maxillofacial region in recent decades tends to increase and obesity contributes to this [1-3], often observed among the population of economically active age [4; 5] and represents a serious medical and economic problem. There is reason to believe that often phlegmon of the maxillofacial region is pathogenetically associated with various chronic diseases of the internal organs (hypertension, chronic heart failure, diabetes mellitus, metabolic syndrome and, in our case, obesity, etc.) by the type of syntropy, and are not chronologically comorbid . The pathogenesis is based on disorders in the vascular wall, peripheral hemodynamic disorder, and immune imbalance. Confirmation of the hypothesis about the syntropy of comorbidity of suppurative diseases of the maxillofacial region is possible with the use of the methodology of the theory of systems, evaluated using integral tools [6].

Concomitant pathology, malnutrition and social status can have a negative impact on the nature of the clinical course of phlegmon of the maxillofacial region [7]. In 2/3 of patients with purulent-inflammatory diseases of the maxillofacial region, the inflammatory process develops against the background of chronic concomitant diseases. Background pathology is the destabilizing homeostasis factor that negatively affects the state of adaptive-compensatory reactions of the body. Chronic diseases in men, combined with smoking and alcohol consumption, cause a more severe course of jaw phlegmon. According to the study of E.N. Vakulenko, the presence of concomitant diseases (diabetes mellitus, diseases of the heart, stomach, kidneys) was detected in 34% of patients with phlegmon of the jaw, and it was found that the peak of appeal falls on the autumn-winter period, when the likelihood of a decrease in immunity and hypovitaminosis increases [4]. Secondary immunodeficiency caused by infectious, allergic, autoimmune diseases contributes to the development of the disease in an atypical form [5; 6;]. Stress also plays an important role in the development of immunopathies [10]. The development of phlegmon of the jaw against the background of chronic diseases of the internal organs significantly complicates preoperative preparation, anesthetic support, the course of the postoperative period and affects the outcome [11]. The aim of the study was to study the epidemiological features of phlegmon of the maxillofacial area in patients with obesity, the degree of polymorbidity of patients and the prevalence among them of risk factors for chronic socially caused non-communicable diseases.

MATERIALS AND RESEARCH METHODS. The study was completed in 2020-2022. in the department of maxillofacial surgery of the 7th city clinical hospital of the city of tashkent in compliance with the requirements for conducting clinical trials (all patients were included in the study based on the principle of informed documented consent). A prospective study followed a group of 60 patients. There were 32 men. (60.0%), women - 28 people. (40.0%).

The criteria for inclusion in the group was the presence of phlegmon of the maxillofacial region: phlegmon of the mouth area or phlegmon of the face. The age of the patients was in the range of 18-82 years, averaging 41.4±1.5 years. Diagnosis of diseases was carried out in accordance with clinical recommendations on the basis of a survey, physical and laboratory-instrumental examination. The social status, the total number of concomitant (background) diseases (FD), the distribution of patients by districts of the region, the presence of risk factors (dependence on psychoactive substances (tobacco, alcohol, tea / coffee, drugs), obesity) were assessed (according to body mass index (BMI)), a history of serum viral hepatitis, sexually transmitted diseases, tuberculosis Polymorbidity was determined by calculating the polymorbidity index using a computer program [12]. The degree of P was recognized as low at PI 1.0–0.80 c.u., medium - 0.79–0.50 c.u., high - 0.49–0.30 c.u., extremely high - ≤ 0.29.

Statistical processing of the results was carried out according to generally accepted methods using an application package (Statistica 6.0 for Windows). With the actual distribution close to normal, and the equality of variances in the compared groups, parametric criteria for comparing quantitative indicators were used; if these conditions were not met, non-parametric analogues were used. The arithmetic mean value was calculated, the error of the mean (M±m), the significance was determined by Student's t-test (the difference was recognized as significant at $p<0.05$). The Pearson correlation coefficient (r) was determined.

RESEARCH RESULTS AND DISCUSSION

Among 60 patients with maxillofacial phlegmon, the proportion of patients of working age (up to 55 years for women and up to 60 years for men) accounted for 82.5% (99 people). The majority (90 people, 75.0%) of the examined patients had phlegmon obesity or a quarter (30 people, 25.0%) had facial phlegmon. In patients with phlegmon of the oral region, the ratio between men and women was 1.1:1, and with phlegmon of the face - 5:1. Despite the fact that two-thirds of patients (90 people, 75.0%) with phlegmone of the maxillary sinus were in the economically active

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age, more than half of them were working (53 people, 58.9%). In a quarter of cases (33 people, 27.5%), no concomitant diseases were detected in patients. The same proportions of patients (29 people, 24.2%) had one and (34 people, 28.3%) two concomitant diseases. Every seventh (18 people, 15.0%) had three, and in 5% of cases four background diseases (FD) were determined.

The group of patients with phlegmon of the maxillofacial area, who did not have concomitant diseases, included 33 people. (27.5%, 20 men and 13 women), whose age fell within the range of 18-68 years, averaging 41.9±1.5 years. Thus, the vast majority (31 people, 93.9%) of patients who did not have were at an economically active age.

One concomitant disease was observed in 29 people. with phlegmon of the maxillary fossa (24.2%, 15 men and 14 women), whose age was in the range of 19-70 years, averaging 41.3 ± 1.5 years. In this subgroup, the proportion of people of economically active age was 89.7% (26 people).

In 34 cases of phlegmon of the maxillofacial area (18 men and 16 women aged 22-82 years, on average 47.3±2.9 years), two FDs were identified. The share of people of economically active age accounted for 76.5%.

The age of patients with two and three FDs was significantly higher than the age of patients with four underlying diseases ($p<0.05$, table). A noticeable (according to the Chaddock scale) inverse relationship was established between the number of FDs and the proportion of patients in the economically active age ($r=-0.555$). At the same time, a close direct relationship was found between the average age of patients with FCL and the number of FDs in the range from 0 to 3 ($r=0.850$).

CONCLUSIONS

1. The majority (82.5%) of patients with FCLO who received inpatient treatment were of economically active age (up to 55 years for women and up to 60 years for men), on average 41.4±1.5 years. At the same time, every fourth (27.5%) did not work for reasons not related to the state of health.
2. Phlegmon and abscess of the mouth area are equally common in men and women (1.1:1, respectively), while facial phlegmon occurs five times more often in men (5:1).
3. More than half (54.1%) of patients with FSLD are overweight or obese, with a male to female ratio of 1.8:1. In 6.7% of cases of FCLO, there is a lack of body weight.

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ISSN: 2749-361X

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