



## PECULIARITIES OF THE CLINICAL COURSE IN PATIENTS WITH VARIOUS PURULENT-INFLAMMATORY DISEASES OF THE MAXILLOFACIAL REGION WHO HAD HEPATITIS B

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<p><b>Received:</b> June 24<sup>th</sup> 2022 <b>Accepted:</b> July 24<sup>th</sup> 2022 <b>Published:</b> August 30<sup>th</sup> 2022</p>	<p>On the material of 60 cases of patients with different purulent-inflammatory diseases of maxillofacial region having hepatitis B . This article demonstrates the severity of the course and high prevalence of acute inflammatory process in the maxillofacial region, as well as the necessity of pathogenetic therapy of hepatitis B in the complex treatment of the discussed group of patients</p>
<p><b>Keywords:</b> hepatitis B, purulent inflammatory diseases, putrefactive necrotic processes, neck phlegmon</p>	

**INTRODUCTION.** While odontogenic infections are daily encountered in dental, oral and maxillofacial surgery, some practitioners may be unfamiliar with a wide range of other infections of various etiologies, some of which are relatively rare or even uncommon. Patients suffering in this way come to their attention either through referrals from primary care providers or because patients are unsure of where to seek care for diseases manifesting in the orofacial area. Also in the inpatient setting, where most oral and maxillofacial surgeons practice, there are regular requests to consult patients who need interdisciplinary collaboration, despite the fact that their conditions are mostly in specialties such as ENT surgery, ophthalmology, dermatology, and others. Phlegmon is a diffusely spreading soft tissue infection unrelated to underlying purulent foci. It includes rapidly spreading areas of edema, erythema, and may be accompanied by lymphangitis and regional lymphadenitis [ 13 ]. Skin lesions may be small and clinically inconspicuous. Predisposing factors for these infections include conditions that make the skin more fragile or local defense mechanisms less effective, such as obesity, previous skin cuts, venous insufficiency, lymphatic obstruction or other causes [ 3 ]. Phlegmon of neodontogenic origin is most commonly caused by  $\beta$ -hemolytic streptococci (usually group A), but can also be caused by other streptococcal species. Less commonly, *C. goldenseal* may be involved, especially in cases involving penetrating trauma. The etiologic diagnosis of phlegmon is often difficult and usually unnecessary for patients with mild signs and symptoms [ 3 ]. Currently, hepatitis B acquires the importance of epidemic and the most important sociopathy associated with the growth of heroin addiction, which determines the increasing turnout of these patients for medical care, requiring both emergency and planned surgical intervention, in

medical and prevention institutions of non-infectious profile [1, 2].

**PURPOSE OF THE STUDY:** The study of features of the clinical course in patients with various purulent-inflammatory diseases of the maxillofacial area who had hepatitis B

**MATERIALS AND METHODS OF RESEARCH:** we studied retrospectively and prospectively the number of 60 patients were examined, 35 of whom were diagnosed with phlegmon of the maxillofacial region who had suffered from hepatitis during 2019-2022. B. In all patients the anamnesis was studied in detail, the patients underwent bacteriological, radiological investigations.

**RESULTS:** According to statistical data from the City Hospital of Oral and Maxillofacial Surgery in Samarkand, patients with hepatitis B accounted for 1% of the total number of patients with purulent diseases, 2.3% in 2019, and 2.3% in 2020. - 3% of patients; and the current admission trend for this patient population is not trending downward. Our clinical experience shows that patients with purulent diseases in the maxillofacial region, suffering from hepatitis B, are characterized by atypical clinical picture of the disease, increased duration of hospitalization, the need to use additional means of antibacterial therapy, conducting expensive antiretroviral therapy. It is considered to be proved that against the background of immunodeficiency the activity of local immunity system in oral cavity sharply decreases and it leads to the development of dental caries and, consequently, complicated forms of acute odontogenic infection [3, 8]. Often this infection, which is the main etiological factor, is concealed by the patient and is detected only upon special examination, and therefore the risk of infecting medical personnel increases. These aspects



determine the relevance of studying peculiarities of the course of purulent-inflammatory diseases in patients with hepatitis B in order to practically improve the quality of diagnosis and treatment of this contingent of patients. We studied 60 patients with various forms of inflammatory diseases of maxillofacial region, 42 (70%) male and 18 (30,5%) female aged from 23 to 46 years. It should be noted that of all examined and treated patients, apart from hepatitis, the patients were found to have other infections. One patient had pulmonary tuberculosis. Terms from the onset of primary signs of the disease to admission to the hospital ranged from 3 days to 1.5 months. Collection of anamnesis revealed systematic intravenous use of drugs, disorderly lifestyle (promiscuous sex was one of the frequent causes). 28 (47.5%) patients had odontogenic osteomyelitis of the lower jaw, complicated by perioromandibular phlegmon of various spaces. Osteomyelitis of the upper jaw was detected in 6 patients (10.2%). Seven patients (11.9%) had maxillofacial wounds in the abscessed stage. Adenophlegmons in the maxillofacial area were diagnosed in 2 (3.4%) observations as a result of an acute respiratory infections; furuncles, carbuncles in 8 (13.6%); in 2 observations (3.4%) a neck cyst was revealed in the abscessed stage; purulent atheroma in 1 (1.6%) patient; chronic maxillary sinusitis complicated by empyema was diagnosed in 4 (6.8%) patients. The distribution of patients by nosology is shown in Fig. 1. Here is a clinical observation.

Patient M., 23 years old, was admitted to the purulent maxillofacial surgery hospital on the 3rd day after the disease had begun, complaining of sharp pain in the area of teeth 26 and 38, moderate pain and left cheek swelling, with the following diagnosis: osteomyelitis of the maxilla from tooth 26; abscess of the left cheek and left mobile fossa. The patient was cachectic, anemic, skin and visible mucous membranes pale. The clinical blood test showed a decrease in erythrocyte count to  $2.5 \times 10^{12}/l$ , hemoglobin to 81 g/l, leukocytosis -  $28.8 \times 10^9 /l$ , bacilliform shift -  $30 \times 10^9 /l$ , accelerated SLE - up to 61 mm/hour. The patient concealed the presence of HIV infection and chronic viral hepatitis "C" at admission. He underwent extraction of tooth 26 and drainage of phlegmon of the left subcuspid fossa and cheek by intraoral access. On the third day of stay in the hospital, despite the antibacterial and detoxification therapy, there was an increase of edema and pain in the left cheek, putrid discharge from the postoperative wounds. Drainage of the left cheek phlegmon by submandibular access was performed. The patient's condition worsened the next day after the operation: edema in the left

submandibular area increased, limitation of mouth opening up to 1.5 cm was noted, putrid discharge was observed from the postoperative wounds. The clinical blood count showed an increase in leukocytosis and bacillary shift. The general condition was severe. Sepsis was diagnosed against the background of anemia, leukocytosis, increase in acute inflammatory phenomena. The patient was admitted to the intensive care ward, where antibacterial and disintoxication therapy was intensified, immunotherapy was prescribed. However, despite intensive therapy, on the next day of stay in the ICU there was observed deterioration of the general condition: edema in the left submandibular area increased and spread to the temporal area. There was pain when swallowing. X-ray examination revealed right-sided pneumonia. The postoperative wound in the left submandibular region was revisited and expanded: putrid discharge from the floor of the oral cavity, peripharyngeal space was obtained, the putrid necrotic process spread to the left lateral surface of the neck. Drainage of the left lateral surface of the neck along the anterior edge of the cricoid muscle was performed. A 38th tooth was extracted because radiological evidence of destruction in the periapical tissues was observed. In the postoperative period, there was putrid discharge and tissue necrosis in the postoperative wounds. Erythrocyte transfusions were performed, antibacterial therapy was intensified, but inflammatory phenomena increased, and on the 10th day the patient became left-sided exophthalmus and hemosis. Phlegmon of the left orbit and subscapular fossa were drained. Despite intensive therapy, the patient's condition progressively worsened. Specific therapy was prescribed in consultation with an infectious disease specialist: Kaletra, Epivir, Zerit. As a result of the complex treatment we gradually observed improvement of the patient's general condition, and on the 28th day the patient was discharged from the hospital after the epithelialization of the postoperative wounds. This clinical observation demonstrates the severity of the course and the rapidity of the spread of the acute inflammatory process in the maxillofacial region in this contingent of patients, as well as the need for pathogenetic therapy in Hepatitis B. Another observation. Patient K., 41 years old, was admitted to the purulent maxillofacial surgery hospital complaining of blunt nagging pains in the region of the lower jaw body on both sides, decreased skin sensitivity of the lower lip, pus flowing from fistulas in the alveolar part of the lower jaw in the lateral parts, which had been bothering him for 2 months. He had been suffering from chronic viral hepatitis "B ". X-ray examination



revealed extensive areas of destruction and sequestration in the region of the lower jaw body on both sides. Bilateral sequestrectomy was performed. It should be noted that neodontogenic inflammatory processes in the maxillofacial region in patients are often complicated by sepsis development. We monitored patient L., 23 years old, who had a carabunculus of the lower jaw. Appearance of a patient with phlegmon of deep cellular spaces of the left anterior-lateral surface of the neck, left cheek and temporal region on the background of Hepatitis B. Sequestration of the lower jaw in the body area with two

Treatment with antibiotics and hepatoprotectors alone is effective in most patients. Therapy should include an antibiotic active against streptococci. A large percentage of patients can take oral medications. Suitable agents include dicloxacillin, cephalexin, clindamycin, or erythromycin, and ursosan is indicated as a hepatoprotective agent. Parenteral therapy is indicated for severely ill patients or those who cannot tolerate oral medications. Reasonable choices include penicillinase-resistant penicillin such as nafcillin, a first-generation cephalosporin such as cefazolin, or clindamycin or vancomycin for patients allergic to penicillin. In cases of uncomplicated cellulitis, a 5-day antibiotic treatment is as effective as a 10-day course. Admittedly, we cannot rule out potential confounding factors such as smoking, alcohol use, family history of cancer, and environmental chemical exposures. In addition, non-oncologic control patients from psychiatric, neurological, and cardiology departments may have a lower incidence of HBV infection. In conclusion, our study represents an important addition to the knowledge of GICA risk factors, and the specific mechanisms deserve further clarification due to the significant number of population-based prospective cohort studies concerning the association of hepatitis B infection and allergy with gastrointestinal carcinogenesis.

**CONCLUSIONS:** Our clinic has a large number of observations of patients with various purulent diseases in the maxillofacial region, developed against the background of chronic viral hepatitis "B". But it should be stated that up till present the standards of operative treatment both in urgent and scheduled indications, and related methods of pre-operative preparation and post-operative management of patients with hepatitis B are absent, the morphological features of the wound process in these patients are not studied in order to develop an approach to their

treatment, which determines the high urgency of the problem under discussion.

#### REFERENCES

1. Tymofieiev OO. Manual of maxillofacial and oral surgery [Russian]. 5th ed. Kyiv: Chervona Ruta-Turs; 2012.
2. Huang TT, Liu TC, Chen PR, Tseng FY, Yeh TH, Chen YS. Deep neck infection: analysis of 185 cases. *Head Neck* 2004;26:854–60. <https://doi.org/10.1002/hed.20014>.
3. Yadav S, Verma A, Sachdeva A. Facial necrotizing fasciitis from an odontogenic infection. *Oral Surg Oral Med Oral Pathol Oral Radiol* 2012;113:e1–4. <https://doi.org/10.1016/j.tripleo.2011.06.010>.
4. Tymofieiev OO. Maxillofacial surgery [Ukrainian]. 2nd ed. Kyiv: Medytsyna; 2017.
5. Taub D, Yampolsky A, Diecidue R, Gold L. Controversies in the management of oral and maxillofacial infections. *Oral Maxillofac Surg Clin North Am* 2017;29:465–73. <https://doi.org/10.1016/j.coms.2017.06.004>.
6. Tymofieiev OO. Maxillofacial surgery [Russian]. 2nd ed. Kyiv: Medytsyna; 2015.
7. Hülsemann W, Habenicht R. Severe side effects after Octenisept irrigation of penetrating wounds in children [German]. *Handchir Mikrochir Plast Chir* 2009;41:277–82. <https://doi.org/10.1055/s-0029-1238282>.
8. Kamalova M., Khaidarov N., Shomurodov K. Microscopic examination of brain tissue in hemorrhagic stroke in uzbekistan //Матеріали конференцій МЦНД. – 2021.
9. Khaidarov Nodir Kadyrovich, Shomurodov Kahramon Erkinovich, &Kamalova Malika Ilhomovna. (2021). Microscopic Examination OfPostcapillary Cerebral Venues In Hemorrhagic Stroke. *The American Journal of Medical Sciences and Pharmaceutical Research*, 3(08), 69–73