

Opening of the Deep Layers of The Side Face in Processes of Purulous Inflammation

Tastanova Gulchexra Eshtayevna
Tulemetov Sabrjan Kalikovich
Scientific leader
Muhammadjonova Muslima
Tashkent State Stomatology Institute
Faculty of Dentistry
Group 309b
A student

Abstract: Purulent inflammatory processes on the face side can lead to severe consequences if not treated in a timely and effective manner. Opening deep floors in such cases is a decisive step towards successful management. This article aims to explore the importance of this procedure to present a comprehensive and informative discussion.

Keywords: Inflammation, subcutaneous, processes, phlegmon, infection, reaction

Introduction: The main group of acute odontogenic inflammatory diseases consists of purulent processes in the soft tissues around the jaws: limited purulent inflammation caused by the formation of a cavity in the cell - abscess; Phlegmon is a purulent inflammation of the subcutaneous fat layer, muscles and fascia. L. Peterson (1988), D. Laskin (1989), P. Romain and other co-authors (1989), S. Harreiz (1991) and others distinguish between abscess and cellulitis.

The latter is understood as diffuse purulent inflammation of the subcutaneous fat layer. At the same time, most authors understand "infiltrate" as an independent form of cell serous inflammation [Katanova H.I., 1990; Roginsky V.V., 1992]. In the generally accepted world literature, the concepts of limited (abscess) and diffuse (phlegmon or cellulitis) purulent process remain.

But in foreign countries, the term "phlegmon" is used more in general surgery [Berchtold R., 1990; Schmitt W., Kiene S., 1991; Heberer G. et al., 1993], and only some authors use it in maxillofacial surgery. E. Boatin and J. Jürgins (1984), O. Sandner and M. Garcia (1984), L. Haisove and T. Wemelh (1989), E. Machtens (1994) Abscess and phlegmonal purulent infections of the face and neck E. Krüger (1986, 1993) - inflammation of the deep cavities of the face, H. Hanenstein (1979), R. Pfisterer (1991) - a severe form of purulent infection.

L. Peterson (1988) considers the abscess to be purulent abscesses of teeth and gums in periostitis of the jaws and periodontal diseases. However, due to the differences in the characteristics of purulent inflammation in different tissue structures and their clinical manifestations, such a connection of different pathological processes is considered unfounded.

Etiology. In abscesses and phlegmons, the resident mixed microflora is the resident mixed microflora in odontogenic foci. Anaerobic infections, obligate and facultative anaerobes, as well as aerobes (symbioses of various forms of staphylococci or streptococci with cocci, intestinal and other bacilli) have been found to be of great importance.

The increase in the number and characteristics of microorganisms is directly related, which leads to an increase in the concentration of antigen exposure and further spread of the infectious-inflammatory process. Also, the associative participation of aerobic and anaerobic bacteria was determined. According to various authors, 80-95% of cases are odontogenic in nature.

Abscesses and phlegmons occur as a result of the spread of infection from the apical focus during exacerbation of chronic periodontitis, to a lesser extent - during acute periodontitis, at the same time, during lower wisdom tooth eruption, purulent radicular cyst, infection of extracted tooth cavity (alveolitis) and periodontal diseases. In its exacerbation, head and neck areas, abscesses and phlegmons, acute and chronic odontogenic osteomyelitis can occur, and this is a complication of acute periostitis of the jaws.

Other sources of infection are the mucous membrane of the oral cavity, upper jaw and nasal cavities, skin and neck areas, less often - eye conjunctivitis. Abscesses and phlegmons around the jaws are more common in people aged 20-30. This is due to the intensity of tooth decay and the difficulty of extraction of wisdom teeth. Abscess and phlegmon diseases are characterized by seasonality: the number of patients is greater in summer and autumn.

Pathogenesis. The onset and course of acute purulent inflammatory diseases in the head and neck region are characterized by microflora concentration, general and local, nonspecific and specific protective factors, organ and organ system activity, as well as anatomo-topographic features of tissues. Depending on these, the inflammatory reaction is characterized - normergic, hyperergic or hypoergic.

Abscesses and phlegmons develop in the spaces of one or two cells due to the non-toxic effect of microbes, mainly due to their concentration and an adequate response of the body. Anatomo-topographic features of skull dome, face and neck areas, as well as foci of infection in pathological odontogenic and other tissues adjacent to adjacent upper and lower jaws are of great importance.

General and local symptoms of abscesses and phlegmons represent a normergic inflammatory reaction. Increasing the effect of harmful factors (increasing their number, increasing the virulence, toxicity and concentration of microbes), the duration of the disease and general and local defense mechanisms against infection, while decreasing the immunity (imbalance) leads to the development of widespread phlegmon. This represents hyperergic inflammation.

Pathological anatomy. In an abscess, a collection of serous, purulent-serous exudation in the cavity of the cell and its wall is granulation. clearly manifested as a limited purulent cavity consisting of a tumor.

Necrotic processes are less expressed in purulent foci. A mature granulation tissue forms a connective tissue capsule around the pus. In phlegmon, the stages of swelling, serous and purulent inflammation alternate with different manifestations of necrotic processes.

In some cases, exudative changes predominate, diffuse serous and serous-purulent inflammation is observed. In this case, significant swelling and diffuse infiltration of leukocytes are observed in the soft tissue cells around the jaw. The focus of inflammation is not clearly demarcated. Separate foci of necrosis surrounded by leukocytes are identified in the damaged tissues.

In other cases (purulent necrotic phlegmons), alteration processes predominate and are characterized by significant tissue hemodynamics, necrosis of muscle and fascia cells. This is clearly manifested in purulent-necrotic phlegmon. In such cases, foci of dense infiltration with foci of hemorrhage are observed against the background of diffuse tissue swelling.

Necrosis of muscle fascia layers and muscle bundles is observed in the center. The appearance of acute inflammation is more evident when purulent or purulent-necrotic foci are spontaneously or surgically opened. Due to leukocytic infiltration, the inflammatory focus is limited by the developed granulation tissue. Necrotized tissue gradually separates and partially decays. Blood circulation is restored, connective tissue develops in place of dead areas.

Summary

Opening the deep layers is an important step in the management of purulent inflammatory processes on the face. This allows effective drainage and clearing of infection, reducing the risk of complications. Proper technique, consideration of anesthesia and hemostasis, proper wound care, and antibiotic administration are essential for successful outcomes.

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