EVALUATION OF THE CONTRIBUTION OF MICROORGANISMS TO THE DEVELOPMENT OF PHLEGMON OF THE MAXILLOFACIAL AREA AND NECK

Cherniak L.

Grodno State Medical University, Grodno, Belarus

Introduction. Despite definite progress in the therapy of pyoinlfammatory diseases of maxillofacial area and deep neck infections they still have high incidence showing no tendency to decrease. This problem still remains quite topical in spite of wide implementation of modern antimicrobial agents (considering the microflora and sensitivity to the latter).

Aim of research to study the microbiological picture of wound discharge in patients with phlegmon of the maxillofacial area and neck.

Material and methods. The study of the microbial flora of the wound discharge was carried out in 92 patients with phlegmons of the maxillofacial region at the age from 18 to 70 years.

Results. The bacteriological studies carried out by us showed that the bacterial contamination of the majority of the examined during the operation was 10⁵-10⁶ CFU/ml. The microbial landscape of the phlegmon contents of the maxillofacial area was characterized by pronounced heterogeneity and was represented by facultative anaerobic and opportunistic microflora. The dominant group of pathogens was made by bacteria of the family of staphylococci and streptococci, which were found in 77.2% of patients. Monoculture was found in 88% of cases, microbial associations of pathogens were isolated in 12% of cases. The synergism of aerobes and anaerobes leads to an increase in the virulence of microflora and contributes to the aggressive course of the inflammatory process, rapid tissue melting and severe intoxication. According to the results of a microbiological study, microorganisms were not isolated in 2.2%, although according to clinical data, during the opening and drainage of phlegmons of the maxillofacial area and neck, there were all the signs characteristic of anaerobic infection. In patients with phlegmon, spreading to several cellular spaces, associations of microorganisms were more often observed. With the damage of the deep cellular spaces of the face and neck, gram-negative flora was often sown. In the study on day 3 against the background of traditional treatment, the quantitative contamination in the wound remained at the same level of 10⁵-10⁶ CFU/ml. A significant decrease in microbial contamination was observed on day 9 (p < 0.05).

Conclusion. The microbial landscape of phlegmon contents is characterized by pronounced heterogeneity and determines the prevalence and severity of the disease.