Proceedings of International Scientific Conference on Multidisciplinary Studies
Hosted online from Moscow, Russia
Date: 11th December, 2023
ISSN: 2835-5733 **Website:** econferenceseries.com

TREATMENT OF PURULENT WOUNDS IN PATIENTS WITH PHLEGMONS OF THE MAXILLOFACIAL AND NECK AREAS

Rustamov Javlonbek Dastonovich
Student of group 303-B, Faculty of Pediatric Stomatology, TSSI

Gadayev A. M.

Introduction

The problem of inflammatory diseases of the tissues of the face and neck always attracts attention otorhinolaryngologists and maximofascial surgeons in establishing a stable frequency of pathology. Despite modern antibacterial therapy, there are still cases when the initial delay in diagnosis and treatment can lead to the appearance of vital activity. Department of otolaryngology and Dentistry, Grodno State Medical University, Belarus Head: O. In a study conducted by khorov, he collected patients between the ages of 5 and 91 and analyzed the clinical picture of a total of 219 patients. And in patients according to the prevalence of purulent processes and labarator studies, it is divided into the following groups.

Results. and discuss.

67.6% of patients receive primary surgical treatment of microorganisms 1, injuries during vaccination 7.9% - in 2 microorganisms, 5% - in 3 or more microorganisms, 19.4% of patients did not identify microorganisms. The most common cultures derived from the wounded composition were staphylococci and streptococci (61.2%). Recently, the presence of mixed (aerobic and anaerobic) microflora in the inflation Center has been noted. O.Khorov analysy 64 MRI and X-CT scans that were stopped on the spread of a purulent process in the deep neck cell cavity. In 52 patients , the process was localized in the neck spaces and surface inflammation in 12 patients continued the process clinical suspicion of mediastin mediastinitis was in only 10 patients.

Conclusion

The treatment of inflammatory diseases of the face and neck and their complications remains complex and difficult. problem in clinical methods of diagnosing diseases, the following should be used methods such as X-CT and MRI with very high clinical-diagnostic efficiency. Antimicrobial therapy plays an important role Antimicrobial rules are recommended and should cover polymicrobial etiology.

Oleksii O. Timafieeva, Alexander V. Umirovb, Anton O. Myroshnykc and Sergii I. Dubichenko conducted a clinical trial of 38 patients in the olibborgan study.

Intervention

Radical removal and immediate restoration of the upper lip mass with microscopic negative boundaries using Abbe cover followed by delayed cover division.

Results

On the basis of the conducted examinations of patients with phlegmons of the maxillofacial area and neck it was objectively proved that the antiseptic solution "Octenisept" used for the local treatment of purulent wounds has a pronounced antiseptic effect, which is much higher than that of traditional antiseptic agents (chlorhexidine)

Conclusions

In patients with phlegmons of the maxillofacial area and neck the antiseptic solution "Octenisept" may be recommended for the local treatment of purulent wounds in order to prevent the development of severe inflammatory complications.

C E U V O R D s: phlegmon of the face-jaw area; deep neck infections; peritonsillar abscesses; pharyngeal abscesses; dental infections

The problem of purulent infections

the face-jaw and neck region is now very important. A lot of foreign scientists have done a lot of scientific work to prevent purulent infection. As a result, buday discovered how purulent processes originate;the widespread use of antibiotics has led to changes composition and characteristics of pyogenic species reduces micros, in turn the effectiveness of antibiotic therapy. In recent years, increased frequency of purulent diseases face-jaw and neck area postoperative complications and transition acute purulent-the number of deaths due to the transition of inflammatory processes to chronic purulent diseases and their complications increased. All this attracted the attention of doctors to the problem of purulent infection. Despite the use of antibiotics, their number purulent complications continue to increase from January 1969 to December 2018 shupyk national maxillofacial surgery clinic Post-tertiary education Medical Academy marked by an increase in the number of patients inflammatory diseases of the face and neck from 53.5% Up to 75.9 percent. Prevalence of high pathogens and antibiotic-resistant microorganisms lead to the appearance of severe forms of inflammation diseases of the face-Face region, accompanied by severe intoxication, impaired immunological condition the body, as

a result of which the humoral level is reduced and cellular immune factors, which contribute to develop severe complications (sepsis, mediastinitis, etc.). Number in recent years death of patients with these complications increased.In the absolute majority of cases (90-96 percent), etiological factor of inflammatory diseases the facial region is an odontogenic infection. Only in 4-10% of cases can microorganisms brought to the soft tissues of the face and neck from non-odontogenic foci (carbuncles, boils, inflamed palatine tonsils, infected wounds, etc.), lymphogenic, contact and dermatogenic pathways. Through the caries cavity in the tooth, microorganisms enter the pulp tissue. If these are bacteria do not have pathogenic properties, then they may not have the first contact with pulp tissue, as a result of their subsequent extraction the same non-pathogenic microbes on the pulp tissue allergic inflammation of the sensitized body can develop. Sometimes penetration microorganisms on the tissues of the tooth pulp sensitivity of the organism before the same microflora of other sources of infection. In this case, the first introduction of microbes can be accompanied by tooth pulp development of allergic inflammation. Odontogenic furnace specificity inflammation is a defect of hard tissues tooth with entrance doors infection, naturally not covered. These are the reasons permanent additional infection of tissues contributes to the area and formation of the face-face foci of chronic infection. Uniform dynamic a balance is established between such a focus infection and the patient's body. It can be broken as a result of the immunological reactivity of patient, increased virulence of the infectious disease if there is an agent or a surrounding connective tissue capsule infectious focus is damaged. Currently, there are different treatments complex caries forms-pulpitis, periodontitis - it cannot be considered perfect. The utility of the filling of the tooth canal is 60-70 percent. Chronic foci inflammation in therapeutic treatment periodontitis does not disappear immediately after finishing the filling of the channel in the Tooth, Even if it is treatment is completed. Tricks in 22% of patients chronic odontogenic inflammation disappears 4-8 months, and in 68% - only 1-2 years or later.Violation of certain methods and conditions treatment of patients with periodontitis, pulpitis leads to the fact that there are foci of open infection closed, not dried and become one of them the main sources that cause the sensitivity of the organism bacteria, toxins and decay products damaged tissues. Causative agent of purulent diseases from the soft tissues of the face-jaw area staphylococci, streptococci, intestinal and pseudomonas sticks, proteus, anaerobes, etc. microorganisms, as well as their associations. Purulent-inflammatory processes

are polymicrobial in nature and caused by aerobic exposure, facultative and anaerobic bacteria. Improve microbiological research methods provided

MATERIALS & METHODS

Oleksii O. to solve the problem. Tymafieeva,*, Alexander V. Umirovb, Anton O. Myroshnykc, & Sergii I. Dubichenkod examined 38 patients. abscesses and phlegmon in the area of the face-jaw and the neck, from 17 to 67 yoshgacha.Biz split in two all 38 patients with phlegmon are divided into two groups Observation: Group I (primary) - 20 patients standard medical treatment complex for local purulent wound effect, the drug is used purulent necrotic stage of the wound process (then cellulite opening). Group II (control) – 18 patients who was given 0.1 percent sterile chlorhexidine bigluconate solution for washing purulent wounds and used in the standard treatment complex for local effect on purulent wound, purulent wound-necrotic stage of the wound process (after opening phlegmona) and antiseptic clothing. All patients underwent surgery (causal tooth removal and dissection phlegmona), followed by drug therapy (including antibacterial, detoxification, general strengthening and symptomatic treatment, immunotherapy). Difference between treatment the groups examined were only in patients Group i (main group)for local treatment the medicine of purulent wounds is used in Octenisept, and 0.1 in Group II (control group) patients% chlorhexidine solution. During hospitalization and in dynamics treatment of patients, we microbiological (detection of detected microflora and determination of antibiotic sensitivity) and general clinical examination. The latter include: examination, palpation, taking Anamnesis, X-ray of the jaws and other methods. The the presence of microflora in a purulent wound it is determined during the treatment process. We comparative analysis of the effect The drug" Octenisept " and topical chlorhexidine clinical signs: postoperative edges purulent wounds (the severity of hyperemia and their infiltration), its walls(depending on weight presence of fibrin plaque, necrosis sites, purulent or serous their absorption), discharge granulation time from purulent wound, changes in the area of purulent wounds. We too studied the severity of inflammatory infiltration perimaxillary soft tissues. Clinical symptoms and obtained laboratory the data was processed by a variational-statistical method using a personal computer. Reliability the results of the survey were calculated by students criteria.

RESULTS & DISCUSSION

Based on microbiological studies, it was established that not only aerobes (in 79.8%), but also anaerobes (21.5%) were found in patients with odontogenic phlegmon in purulent foci. Microorganisms were both in monoculture – 67.5% (aerobes – 56.9 %, anaerobes – 8.8 %), and in associations – 32.7% (only aerobes – 20.2 %, only anaerobes – 2.7 percent, aerobes and anaerobes – 10 percent). Aerobes were represented by Staphylococcus aureus and S. epidermidis, Escherichia coli, hemolytic streptococcus, enterococci, Proteus and diplococcus. Gram-negative bacteria (bacteroids, veylonones) and gram-negative bacteria (peptostreptococci, eubacteria) were found among anaerobes. In monoculture, S. aureus and S. epidermidis, veylonella, peptostreptococci and eubacteria were sown more often.Thus, when spilled purulent processes of softtissues that were located in the same anatomical region the monocultures of aerobic microorganisms were detected, and in patients with cellulitis which occupied two or more anatomical areas (floor of mouth, half of the face) – anaerobic monocultures, only anaerobic associations, associations of different types of aerobes, as well as anaerobic and aerobic microbes. In patients with diffuse purulent-inflammatory processes in the soft tissues of monoculture,staphylococci were sensitive to aminoglycoside preparations and, to a lesser extent, to semi-synthetic penicillins and anti-staphylococcal antibiotics of the reserve. In associations with aerobes, the antibiotic sensitivity of staphylococci was significantly reduced, and with anaerobes, staphylococci were resistant to all antibiotics except aminoglycosides and cephalosporins. Hemolytic streptococci were sensitive to most of the antibiotics studied, which did not depend on their associative connections. Gram-negative aerobic microorganisms (intestinal and) Pseudomonas aeruginosa, enterococcus, protei) and their associations, which were sensitive to aminoglycoside and cephalosporin preparations, rarely to other antibiotics, showed the greatest resistance to antibiotics. We determined the frequency of inoculation of pathogenic microorganisms from the purulent focus in patients with phlegmon of the maxillofacial area and neck in the dynamics of the treatment carried out in the main and control groups.Immediately after opening the cellulitis from the purulent focus, in the main and control observation groups, the microorganisms were seeded in 100%. For 3-4 days of the local treatment with Octenisept (main group), the microorganisms from the purulent focus were sown in 11 patients (56.9%), and in the treatment with chlorhexidine (control group) – in 15 patients (83.9%). On the 7-8th day of the treatment, in the main observation group, microorganisms from the

purulent focus were sown in 2 subjects (10 percent), and in the control group – in 5 patients (37.4%).Changes in the severity of hyperemia of the purulent wound edges were studied in patients with phlegmon of the maxillofacial area and neck in the dynamics of the treatment carried out (Fig 3). It was established that on the next day after the opening of the phlegmon, a pronounced hyperemia of the festering wound edges was noted in 100 percent of cases both in the main observation group and in the control group. On the 3-4th day of the local treatment with the drug "Octenisept" (main group), severe hyperemia of the festering wound edges was observed in 9 patients (45%), and moderate – in 11 patients (56%). For 3-4 days of treatment with chlorhexidine (control group), severe hyperemia of the purulent wound edges occurred in 14 patients (77.8 %), and moderate – in 4 patients (20.2%). At 7-8 days of treatment with the drug "Octenisept", moderate hyperemia was observed in 6 patients (30 percent), while the rest had no wound edges in the hyperemia (70 percent). On the 7-8th day of the local treatment with chlorhexidine, moderate hyperemia of the purulent wound edges was found in 8 subjects (37.4%), and in the rest of the patients there was no hyperemia (55.6%).

Conclusions

Based on the exams takenpatients with phlegmon of the face-jaw area andneck, objectively proved to be an antisepticthe drug Octenisept is used for local treatment purulent wounds have a pronounced antisepticeffect, which is much higher than traditional antiseptic substances (chlorhexidine).In patients with facial-jaw phlegmon region and neck, Octenisept can be a medicine recommended for purulent topical treatment wounds to prevent their development severe inflammatory complications.

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.
3. Head Neck 2004;26:854–60. https://doi.org/10.1002/hed.20014.
4. 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.
5. Tymofieiev OO. Maxillofacial surgery [Ukrainian]. 2nd ed. Kyiv: Medytsyna; 2017. Taub D, Yampolsky A, Diecidue R, Gold L. Controversies in the management of oral and maxillofacial infections. Oral Maxillofac Surg Clin

6. North Am 2017;29:465–73. https://doi.org/10.1016/j.coms.2017.06.004. 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. Gore MR. Odontogenic necrotizing fasciitis: a systematic review of the literature. BMC Ear Nose Throat Disord 2018;18:14. https://doi.org/10.1186/s12901-018-0059-y.
9. McQuinn M, Horswell BB. First case of cutaneous orbital abscess caused by Gemella: a case report and review of the literature. J Oral Maxillofac Surg 2019;S0278-2391(19):30124–https://doi.org/10.1016/j.joms.2019.01.049.
10. Bulgurcu S, Arslan IB, Demirhan E, Kozcu SH, Cukurova I. Neck abscess: 79 cases. North Clin Istanb 2015;2:222–6. https://doi.org/10.14744/ nci.2015.50023.
11. Abramowicz S, Rampa S, Allareddy V, Lee MK. The burden of facial cellulitis leading to inpatient hospitalization. J Oral Maxillofac Surg 2017;75:1656–67. https://doi.org/10.1016/j.joms.2017.01.032.
12. Shaariyah MM, Marina MB, Mohd Razif MY, Mazita A, Primuharsa Putra SH. Necrotizing fasciitis of the head and neck: surgical outcomes in three cases. Malays J Med Sci 2010;17:51–5.
13. Park E, Hirsch EM, Steinberg JP, Olsson AB. Ascending necrotizing fasciitis of the face following odontogenic infection. J Craniofac Surg 2012;23:e211–4. https:// doi.org/10.1097/SCS.0b013e31824de3e7.
14. Gujrathi AB, Ambulgekar V, Kathait P. Deep neck space infection – a retrospective study of 270 cases at tertiary care center. World J Otorhinolaryngol Head Neck Surg 2016;2:208–13. https://doi.org/10.1016/j.wjorl.2016.11.003.
15. Rana RS, Moonis G. Head and neck infection and inflammation. Radiol Clin North Am 2011;49:165–82. https://doi.org/10.1016/j.rcl.2010.07.013.
16. Yang W, Hu L, Wang Z, Nie G, Li X, Lin D, Luo J, Qin H, Wu J, Wen W, Lei W. Deep neck infection: a review of 130 cases in Southern China. Medicine (Baltimore) 2015;94:e994. https://doi.org/10.1097/MD.0000000000000994.
17. Brito TP, Hazboun IM, Fernandes FL, Bento LR, Zappelini CEM, Chone CT, Crespo AN. Deep neck abscesses: study of 101 cases. Braz J Otorhinolaryngol 2017;83:341–8. https://doi.org/10.1016/j.bjorl.2016.04.004.

18. Song CW, Yoon HJ, Jung DW, Lee SH. Cervical Necrotizing Fasciitis Caused by Dental Infection. Maxillofac Plast Reconstr Surg 2014;36:67–72. https://doi.org/10.14402/jkamprs.2014.36.2.67.

19. Cutilli T, Cargini P, Placidi D, Corbacelli A. Necrotizing fasciitis of the maxillofacial region caused by dental infection. A case report and review. Minerva Stomatol 2007;56:469–76.

20. Chalifoux JR, Vachha B, Moonis G. Imaging of Head and Neck Infections: Diagnostic Considerations, Potential Mimics, and Clinical Management. Semin Roentgenol 2017;52:10–6. https://doi.org/10.1053/j. ro.2016.07.004.

21. Qiu Y, Li Y, Gao B, Li J, Pan L, Ye Z, Lin Y, Lin L. Therapeutic efficacy of vacuum sealing drainage-assisted irrigation in patients with severe multiple-space infections in the oral, maxillofacial, and cervical regions. J Craniomaxillofac Surg 2019;47:837–41. https://doi.org/10.1016/j.jcms.2019.01.031.

22. Heim N, Faron A, Wiedemeyer V, Reich R, Martini M. Microbiology and antibiotic sensitivity of head and neck space infections of odontogenic origin. Differences in inpatient and outpatient management. J Craniomaxillofac Surg 2017;45:1731–5. https://doi.org/10.1016/j.jcms.2017.07.013.

23. Opitz D, Camerer C, Camerer DM, Raguse JD, Menneking H, Hoffmeister B, Adolphs N. Incidence and management of severe odontogenic infections - a retrospective analysis from 2004 to 2011. J