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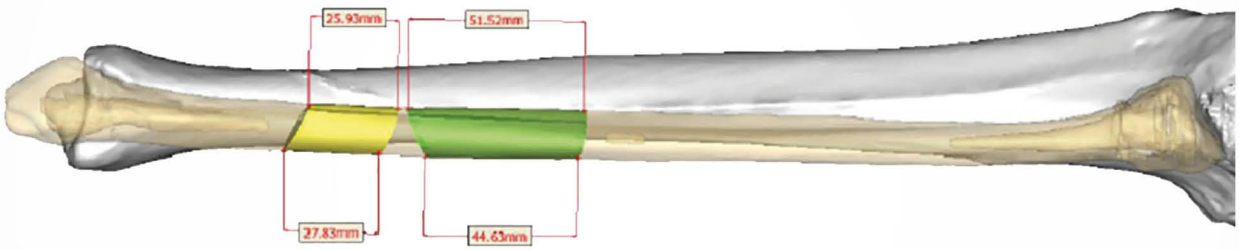

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Goals & Scope

Journal of Diagnostics & Treatment of Oral & Maxillofacial Pathology goals to publish the cutting-edge and peer-reviewed articles on work in oral and maxillofacial surgery and neighboring specialties. The journal includes the following topics: implants surgery, head and neck imaging, microvascular and reconstructive surgery, oral and maxillofacial pathology, head and neck surgery/oncology, TMJ lesions/disorders, head and neck trauma, plastic surgery, pharmacology/drugs.

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Editorial Board

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FIGURE. Professor Oleksii O. Tymofieiev (*left*) and Professor Rui P. Fernandes (*right*) at 1st International Scientific Congress of the Azerbaijan Society of Oral and Maxillofacial Surgeons. 14 March, 2019; Baku, Azerbaijan.

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TANTUM VERDE®

INFORMATION LEAFLET
for the medicinal product

Composition:
active substance: **benzydamine hydrochloride**;
100 mL of solution contain benzydamine hydrochloride 0.15 g;
excipients: ethanol 96%, glycerol, methyl parahydroxybenzoate (E 218), flavor (menthol), saccharin, sodium hydrocarbonate, Polysorbate 20, Quinoline Yellow (E 104), Patent Blue V (E 131), purified water.

Dosage form. Oromucosal solution.
Basic physical and chemical properties: a clear green liquid with a typical mint flavor.

Pharmacotherapeutic group. Dental preparations. Other agents for local oral treatment.
ATC code: A01A D02.

Pharmacological properties.
Pharmacodynamics.
Benzydamine is a non-steroidal anti-inflammatory drug (NSAID) with analgesic and antiexudative properties.

Clinical studies have shown that benzydamine is effective in the relief of symptoms accompanying localized irritation conditions of the oral cavity and pharynx. Moreover, benzydamine has anti-inflammatory and local analgesic properties, and also exerts a local anesthetic effect on the oral mucosa.

Pharmacokinetics.
Absorption through the oral and pharyngeal mucosa has been proven by the presence of measurable quantities of benzydamine in human plasma. However, they are insufficient to produce any systemic pharmacological effect. The excretion occurs mainly in urine, mostly as inactive metabolites or conjugated compounds.

When applied locally, benzydamine has been shown to cumulate in inflamed tissues in an effective concentration due to its ability to permeate through the mucous membrane.

Clinical particulars.
Indications.
Symptomatic treatment of oropharyngeal irritation and inflammation; to relieve pain caused by gingivitis, stomatitis, pharyngitis; in dentistry after tooth extraction or as a preventive measure.
Contraindications.
Hypersensitivity to the active substance or to any other ingredients of the product.

Interaction with other medicinal products and other types of interaction.
No drug interaction studies have been performed.

Warnings and precautions.
If sensitivity develops with long-term use, the treatment should be discontinued and a doctor should be consulted to get appropriate treatment.

In some patients, buccal/pharyngeal ulceration may be caused by severe pathological processes. Therefore, the patients, whose symptoms worsen or do not improve within 3 days or who appear feverish or develop other symptoms, should seek advice of a physician or a dentist, as appropriate.

Benzydamine is not recommended for use in patients hypersensitive to acetylsalicylic acid or other non-steroidal anti-inflammatory drugs (NSAIDs).

The product can trigger bronchospasm in patients suffering from or with a history of asthma. Such patients should be warned of this.

For athletes: the use of medicinal products containing ethyl alcohol might result in positive antidoping tests considering the limits established by some sports federations.

Use during pregnancy or breast-feeding
No adequate data are currently available on the use of benzydamine in pregnant and breastfeeding women. Excretion of the product into breast milk has not been studied. The findings of animal studies are insufficient to make any conclusions about the effects of this product during pregnancy and lactation.

The potential risk for humans is unknown.

TANTUM VERDE should not be used during pregnancy or breast-feeding.

Effects on reaction time when driving or using machines
When used in recommended doses, the product does not produce any effect on the ability to drive and operate machinery.

Method of administration and doses.
Pour 15 mL of TANTUM VERDE solution from the bottle into the measuring cup and gargle with undiluted or diluted product (15 mL of the measured solution can be diluted with 15 mL of water). Gargle 2 or 3 times daily. Do not exceed the recommended dose.

Children.
The product should not be used in children under 12 years due to a possibility of ingestion of the solution when gargling.

Overdosage.
No overdose has been reported with benzydamine when used locally. However, it is known that benzydamine, when ingested in high doses (hundreds times higher than those possible with this dosage form), especially in children, can cause agitation, convulsions, tremor, nausea, increased sweating, ataxia, and vomiting. Such acute overdose requires immediate gastric lavage, treatment of fluid/salt imbalance, symptomatic treatment, and adequate hydration.

Adverse reactions.
Within each frequency group, the undesirable effects are presented in order of their decreasing seriousness.

Adverse reactions are classified according to their frequency: very common (≥ 1/10); common (≥ 1/100 to <1/10); uncommon (≥ 1/1,000 to <1/100); rare (≥ 1/10,000 to <1/1,000); very rare (<1/10,000); frequency unknown (cannot be estimated from the available data).

Gastrointestinal disorders: rare – burning mouth, dry mouth; *unknown* – oral hypesthesia, nausea, vomiting, tongue edema and discoloration, dysgeusia.

Immune system disorders: rare – hypersensitivity reaction, *unknown* - anaphylactic reaction.

Respiratory, thoracic and mediastinal disorders: very rare –laryngospasm; *unknown* – bronchospasm.

Skin and subcutaneous tissue disorders: uncommon – photosensitivity; *very rare* – angioedema; *unknown* – rash, pruritus, urticaria.

Nervous system disorders: unknown – dizziness, headache.

TANTUM VERDE contains methyl parahydroxybenzoate, which can cause allergic reactions (including delayed-type reactions).

Shelf life. 4 years.

Storage conditions.
Do not store above 25°C. Keep out of reach of children.

Packaging.
120 mL of solution in a bottle with a measuring cup; 1 bottle per cardboard box.

Dispensing category.
Over-the-counter medicinal product.

Manufacturer.
Aziende Chimiche Riunite Angelini Francesco A.C.R.A.F. S.p.A., Italy.

Location of the manufacturer and its business address. Via Vecchia del Pinocchio, 22 – 60100 Ancona (AN), Italy.

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September 26, 2018.

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From a January 2019 the *Journal* became a monthly publication. Taking into account that individuals or institutions who have already subscribed 4 Issues (in 2019) or will subscribe the *Journal* in 2019 will receive additional 8 Issues free of charge.

From the end of 2019 it will be possible to subscribe all 12 of 2020-year Issues.

ANOUNCMENT: At the end of the 2019 it will be possible subscribe the *Journal* from any corner of the globe via *Journal*`s website.

Number of Issues (Numbers)	Cost
4 issues in 2019 (March, June, September, December)	US $ 27.68 (UAH 782.00)
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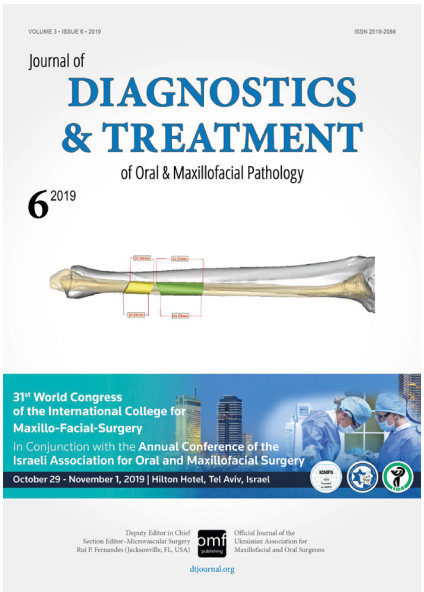

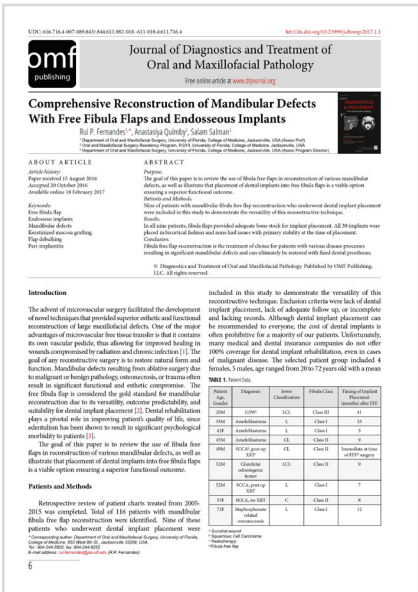

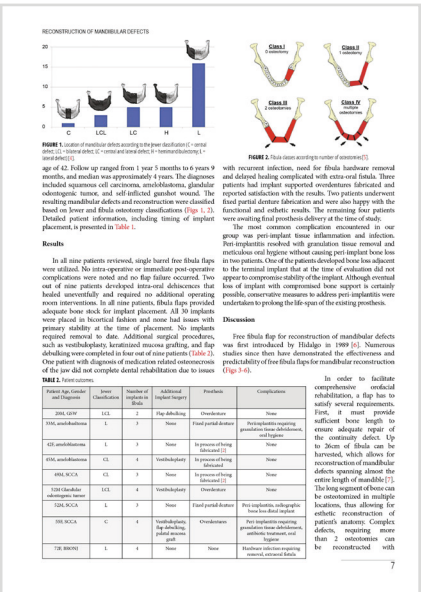

Journal`s cover image (virtual surgical planning for a segmental mandibular reconstruction with fibula transplant) is courtesy of:

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Image was taken from the article (*upper images* is a first and second pages of the publication): Fernandes RP, Quimby A, Salman S. Comprehensive reconstruction of mandibular defects with free fibula flaps and endosseous implants. *J Diagn Treat Oral Maxillofac Pathol* **2017**;1:6–10.

WELCOME LETTER

Dear Colleagues,

Tradition and progress coming together.

Maxillofacial surgery is one of the most diverse and challenging professions. We operate while influencing on a person's facial appearance, some of the times unintentionally while at other times in order to improve appearance. We treat bony tissue and soft tissue, functional structures and aesthetic structures, healthy people and sick ones, children and adults. Our field includes numerous procedures; from minor oral surgery and implantology up to major head & neck surgery and reconstruction.

Due to the diversity of our field, an increased number of technological developments are introduced constantly, starting from minimal invasive endoscopic instrumentation up to virtual 3D pre planning of operations and personalized surgical guides and implants.

Research is an important part of our field and completes the clinical activity.

All of the above require us to exchange experiences and developments in our field in order to allow the best possible care for our patients.

In light of the importance of these scientific meetings it is my pleasure to invite you to the 31st World Congress of the International College for Maxillo-Facial-Surgery (ICMFS), which will be held in Tel Aviv, Israel between the 29th of October and the 1st of November 2019 (www.icmfs2019.com).

This congress will include keynote lectures from some of the most experienced and well known surgeons of our field.

In addition, we want this congress to act as a platform for all of you to exhibit your experience as well as your research accomplishments while conducting discussions to improve you as a clinician and researcher.

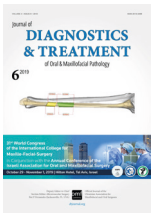
In this congress you will be exposed to keynote lectures, oral presentations, poster presentations, masterclasses, panel discussions, evening receptions and more. You will get the chance to meet new people in your field and form collaborations.

You will have the opportunity to see Israel with all of its historical past and numerous beaches and cultural experience as well as great food and great weather.

We are looking forward to meet you all in the congress and have a wonderful time together in Israel.

Adi Rachmiel, Professor
President, 31st ICMFS World Congress 2019

Dr. Yoav Leiser
President Elect, Israeli Association for Oral and Maxillofacial Surgery



Editorial

What Are the DTJournal.org Top Devices From 2017 to 2019?

Ievgen I. Fesenko

Your website is your greatest asset. More people view your webpages than anything else.
—Amanda Sibley
Director of Marketing, HubSpot for Startups

The *DTJournal*`s website was officially launched on February 18, 2017. Total number of DTJournal.org users from that date to June 15, 2019 reached 1,154 persons. Among them 57.60 percent (664 persons) were desktop users (Fig), 41.20 percent (475 persons) were mobile users, and only 1.20 percent (14 persons) used tablet.[1] That statistics teaches us how important is for the DTJournal.org developers to pay attention to the design and the convenience of using the site content at smartphones.

Building a strong *DTJournal* Digital Team will allow reaching our strategic media goals in building cutting-edge media platform which helps to grow an Impact Factor.[2, 3] As competition with media giants like Springer Nature, Elsevier, Wolters Kluwer, John Wiley & Sons, Taylor & Francis Group, Thieme, SAGE Publishings, etc. needs a lot of efforts, investments, innovations, and, of course, permanent recommendations from editors, reviewers, authors, and readers.

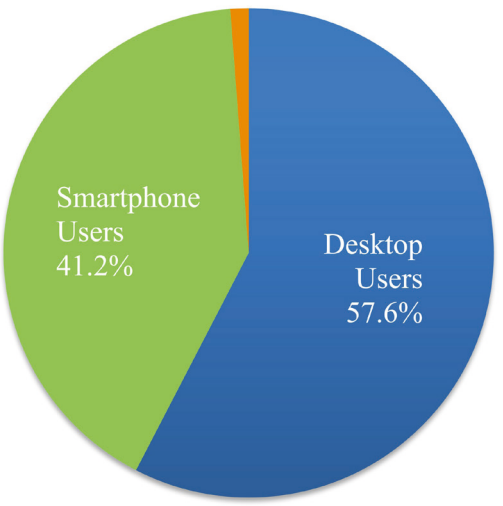


FIGURE. *Blue* segment indicates 57.6% of desktop users, *green* segment – 41.2% of smartphone users, and *orange* segment – 1.2% of tablet users.[1]

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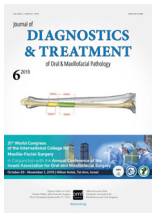

Head and Neck Infection

Treatment of Purulent Wounds in Patients with Phlegmons of the Maxillofacial and Neck Areas

Oleksii O. Tymofieiev[a,*], Olexander V. Umirov[b], Anton O. Myroshnyk[c], & Sergii I. Dubichenko[d]

ABSTRACT

Purpose
To determine the effectiveness of the use of the antiseptic solution "Octenisept" in complex for the treatment of purulent wounds in patients with phlegmons of the maxillofacial and neck areas.

Methods
A clinical examination of 38 patients with phlegmons of the maxillofacial area and neck was conducted.

Intervention
Radical excision of an upper lip mass with microscopically negative margins and immediate reconstruction using Abbe flap followed by delayed flap separation.

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.

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The problem of purulent infections affecting the maxillofacial region is now extremely important. It has repeatedly been the subject of discussion at congresses, symposia, conferences and other forums both in this country and abroad. Numerous studies of native and foreign authors are devoted to its development.

More than forty years ago (ie, during the period of mass use of antibiotics) even small doses of these drugs prevented the development of purulent complications, including sepsis and mediastinitis. The successes achieved in the treatment of purulent infections were so great that many doctors considered the problem of the prevention and treatment of surgical infection solved. This led to the fact that they began to neglect the established principles and methods of antibiotics. In surgical hospitals the gradual elimination of departments for the treatment of purulent infections has started. The widespread use of antibiotics led to changes in species composition and properties of the pyogenic microbial flora, and this, in turn, reduces the effectiveness of antibiotic therapy. In recent years, an increase in the frequency of purulent diseases of the maxillofacial area as well as the number of postoperative complications and the transition of acute purulent-inflammatory processes to chronic ones has been noted. The number of deaths due to purulent diseases and their complications has increased. All this attracted the attention of doctors to the problem of purulent infection ones again.[1-6]

Despite the use of antibiotics, the number of purulent complications is steadily increasing and now it has reached the level of the 40-50 of the last century.

The reasons for the increase in the number of patients with inflammatory diseases of the soft tissues of the maxillofacial area and neck are the following:

- Late appeal for medical care, which is associated with insufficiently conducting sanitary and educational work among the population.
- Medical errors made at the prehospital stage of treatment, and often self-medication of patients.
- Established stereotype in the appointment of drug therapy; late diagnosis of diseases and developed complications, and, consequently, incorrect treatment tactics.
- Changes in the species composition of pathogens and reduced reactivity of the patient.

Purulent-inflammatory diseases of soft tissues are one of the most common types of pathology in the clinic of maxillofacial surgery. In recent years, the number of patients with these diseases has increased significantly, the severity of the process has worsened, which often leads to such severe and formidable complications, such as mediastinitis, sepsis, thrombophlebitis of the face and sinuses of the brain.

From January 1969 to December 2018, the clinic of maxillofacial surgery of Shupyk National Medical Academy of Postgraduate Education marked an increase in the number of patients with inflammatory diseases of the face and neck from 53.5 to 75.9 percent. The prevalence of highly pathogenic and antibiotic-resistant microorganisms leads to the occurrence of severe forms of inflammatory diseases of the maxillofacial region, accompanied by severe intoxication, impaired immunological status of the body, resulting in reduced levels of humoral and cellular immunity factors, which contributes to the development of severe complications (sepsis, mediastinitis, etc.). In recent years, the number of deaths of patients with these complications has increased and amounted to 0.13-0.30 percent.[4, 6]

In the absolute majority of cases (90-96 percent), the etiological factor of inflammatory diseases of the maxillofacial region is an odontogenic infection. In only 4–10% of cases, microorganisms can be brought into the soft tissues of the face and neck from non-odontogenic foci (carbuncles, boils, inflamed palatine tonsils, infected wounds, etc.), lymphogenous, contact and dermatogenic pathways.

Through the carious cavity in the tooth, microorganisms enter the pulp tissue. If these bacteria are devoid of pathogenic properties, then their first contact with the pulp tissues may not be accompanied by the development of a pronounced inflammatory reaction. However, the penetration of the products of vital activity of microorganisms through the system of lymphatic vessels into the regional lymph nodes, followed by their fixation by immunocompetent cells, already at this phase of the development of the pathological process can cause the production of antibodies and sensitization of the

organism. As a result of the subsequent receipt of the same non-pathogenic microbes into the pulp tissue of a sensitized organism, an allergic inflammation may develop. Sometimes the penetration of microorganisms into the tissue of the tooth pulp is preceded by sensitization of the organism to the identical microflora of some other source of infection. In this case, the first introduction of microbes into the pulp of the tooth may be accompanied by the development of allergic inflammation.

The peculiarity of odontogenic foci of inflammation is that the defects of the hard tissues of the tooth, which are the entrance gates of the infection, are not naturally compensated. This causes a constant additional infection of the tissues of the maxillofacial area and contributes to the formation of foci of chronic infection. A kind of dynamic equilibrium is established between such a focus of infection and the patient's body. It can be impaired as a result of the immunological reactivity of the patient, an increase in the virulence of the infectious agent, or if the connective tissue capsule surrounding the infectious focus is damaged.

The currently used methods of treatment of various forms of complicated caries – pulpitis, periodontitis – cannot be considered perfect. The usefulness of tooth canal filling is 60-70 percent. Chronic foci of inflammation in the therapeutic treatment of periodontitis do not disappear immediately after the completion of canal filling in the tooth, even if this treatment is complete. In 22 percent of patients, foci of chronic odontogenic inflammation disappear in 4-8 months, and in 68% – only in 1-2 years or later.[1-7]

Violation of certain methods and terms of treatment of patients with periodontitis, pulpitis leads to the fact that the foci of open infection become closed, undrained and become one of the main sources causing sensitization of the organism to bacteria, toxins and decomposition products of damaged tissues.

The causative agents of purulent diseases of the soft tissues of the maxillofacial area are staphylococci, streptococci, intestinal and pseudomonas bacilli, proteus, anaerobes and other microorganisms, as well as their associations.[8-17] Purulent-inflammatory processes are polymicrobial in nature and result from the action of aerobic, facultative and anaerobic bacteria. Improvement of microbiological research methods has provided convincing evidence that anaerobic bacteria can be the causative agents of odontogenic infection. At the same time, bacteroides, fusobacteria, peptococci, peptostreptococci, veylonella and other anaerobic microorganisms occupy a significant place among them. The pathological process caused by these pathogens is characterized by different localization and variety of clinical manifestations, depending on the species composition of the pathogens. In addition, the resistance of bacteroides, especially the type of fragilis, to a wide range of antibiotics creates difficulties in treating patients.[1-5]

Recent studies have noted that the main causative agents of acute odontogenic infection include not only staphylococcus, but also various representatives of gram-negative microflora: *Proteus*, *E. coli*, *Klebsiella*, etc. More and more often there are reports that the purulent contents of the lesions of odontogenic inflammation are "sterile". The reason for this conclusion is that in this case the development of the inflammatory process occurs under the influence of anaerobic microorganisms, which cannot be detected on ordinary media. Therefore, to identify anaerobes a special transport medium is used.

In the clinic of maxillofacial surgery, abscesses and cellulitis of the maxillofacial area and neck, in terms of frequency of their occurrence, occupy one of the first places.[18-30] In recent years, the number of patients with this pathology has increased significantly, the course y of the process has worsened, which often leads to such severe complications as mediastinitis, sepsis, facial vein thrombosis of the face and brain sinuses. Thus, the relevance of this research topic does not cause doubts.

Considering the aforementioned polymicrobial nature of the purulent focus for the local treatment of purulent wounds, our attention was drawn to the water antiseptic – the drug Octenisept (Schülke and Mayr GmbH, Norderstedt, Germany).[7] This drug has a very wide range of antimicrobial action. The action is carried out due to the hydrophobic interaction of octenidine dihydrochloride and phenoxyethanol with the cytoplasmic membranes of pathogenic microorganisms. 100 g of the solution for external use contains 0.1 g of octenidine dihydrochloride and 0.2 g of phenoxyethanol. The mechanism of action of the drug is based on the ability of its active components to destroy the cell membranes of susceptible microorganisms. Gram-positive and gram-negative

microorganisms are sensitive to the action of the drug, including: *Mycobacterium tuberculosis*, *Streptococcus* spp. (including *Streptococcus pneumoniae*), *Staphylococcus* spp. (including *Staphylococcus aureus*), *Enterococcus* spp., *Neisseria gonorrhoeae*, *Neisseria meningitides*, *Escherichia coli*, *Shigella* spp., *Proteus mirabilis*, *Pseudomonas aeruginosa*, *Corynebacterium diphtheriae*, *Gardnerella vaginal*. In addition, mushrooms are sensitive to the action of the drug, including *Ascomycota*, *Trichophyton* spp. and *Microsporum* spp., *Candida albicans*. The drug is active against viruses, including herpes simplex virus, hepatitis B, C and D virus, human immunodeficiency virus. Sensitivity to the Octenisept preparation was also observed in *Chlamydia trachomatis*, *Trichomonas vaginalis*, *Mycoplasma* spp. and *Ureaplasma* spp. The drug exhibits bactericidal, fungicidal and virostatic activity against strains resistant to the action of other chemotherapeutic drugs. The drug is low toxic, not absorbed into the systemic circulation, including through the wound surface. When using the drug, acceleration of healing processes is noted due to some immunostimulating action of the drug. After external use, the effect of the drug develops within 30 seconds and persists for a long time.

Patients with purulent wounds are treated on areas of the skin with undiluted drug, which is applied to a cotton swab, gauze bandage or sprayed with a special nozzle. In order to prevent and treat topical inflammation of the oral cavity and nasopharynx, Octenisept should be diluted with purified water or 0.9% sodium chloride solution in a 1: 2 or 1: 3 ratio, and when washing the cavities (maxillary or frontal sinuses) or processing nasal passages – in the ratio of 1: 6 (order No. 273 of 03/28/2016, registration certificate No. UA/4056/01/01). Octenisept is not compatible with iodine-containing drugs (antiseptics). Frequency of use of Octenisept – 2-3 times a day, if necessary – up to 6 times a day.

The purpose of this study is to determine the effectiveness of the Octenisept for the local treatment of patients with abscesses and phlegmon of the maxillofacial and neck areas.

MATERIALS & METHODS

To solve the problem, we examined 38 patients with abscesses and phlegmons of the maxillofacial area and neck, aged 17 to 67 years (Fig 1). We divided all 38 patients with phlegmon into two groups of observation: Group I (main) – 20 patients who, in the complex of standard medical treatment for local impact on the purulent wound, used the drug in the purulent necrotic phase of the wound process (after opening the cellulitis). Group II (control) – 18 patients whom was given a 0.1 percent sterile chlorhexidine bigluconate solution to wash purulent wounds and applied in the complex of standard treatment for local impact on a purulent wound, in the purulent-necrotic phase of the wound process (after opening the phlegmon) and antiseptic dressings.

All patients underwent surgical treatment (removal of the causal tooth and dissection of phlegmon) followed by drug therapy (including antibacterial, detoxification, general strengthening and symptomatic treatment, immunotherapy).

The difference in treatment between the examined groups was only in the fact that patients of the group I (main group) for the local treatment of purulent wounds used the drug Octenisept, and patients of the group II (control group) had a 0.1% chlorhexidine solution.

During hospitalization and in the dynamics of treatment of patients, we conducted a microbiological (identification of the identified microflora and the establishment of its antibiotic sensitivity) and general clinical examination. The latter included: examination, palpation, medical history taking, radiography of the jaws and other methods. The presence of microflora in the purulent wound was determined in the course of the treatment. We conducted a comparative analysis of the effect of the drug "Octenisept" and chlorhexidine on local clinical symptoms: the edges of postoperative purulent wounds (severity of hyperemia and their infiltration), its walls (depending on the severity of fibrin plaque, the presence of areas of necrosis, purulent or serous their impregnation), discharge from the purulent wound, the timing of granulation, changes in the area of purulent wounds. We also studied the severity of inflammatory infiltration of perimaxillary soft tissues.

Clinical symptoms and the obtained laboratory data were processed by a variation-statistical method using a personal computer. The reliability of the survey results was calculated according to Student's criteria. Differences were considered significant at $p < 0.05$.

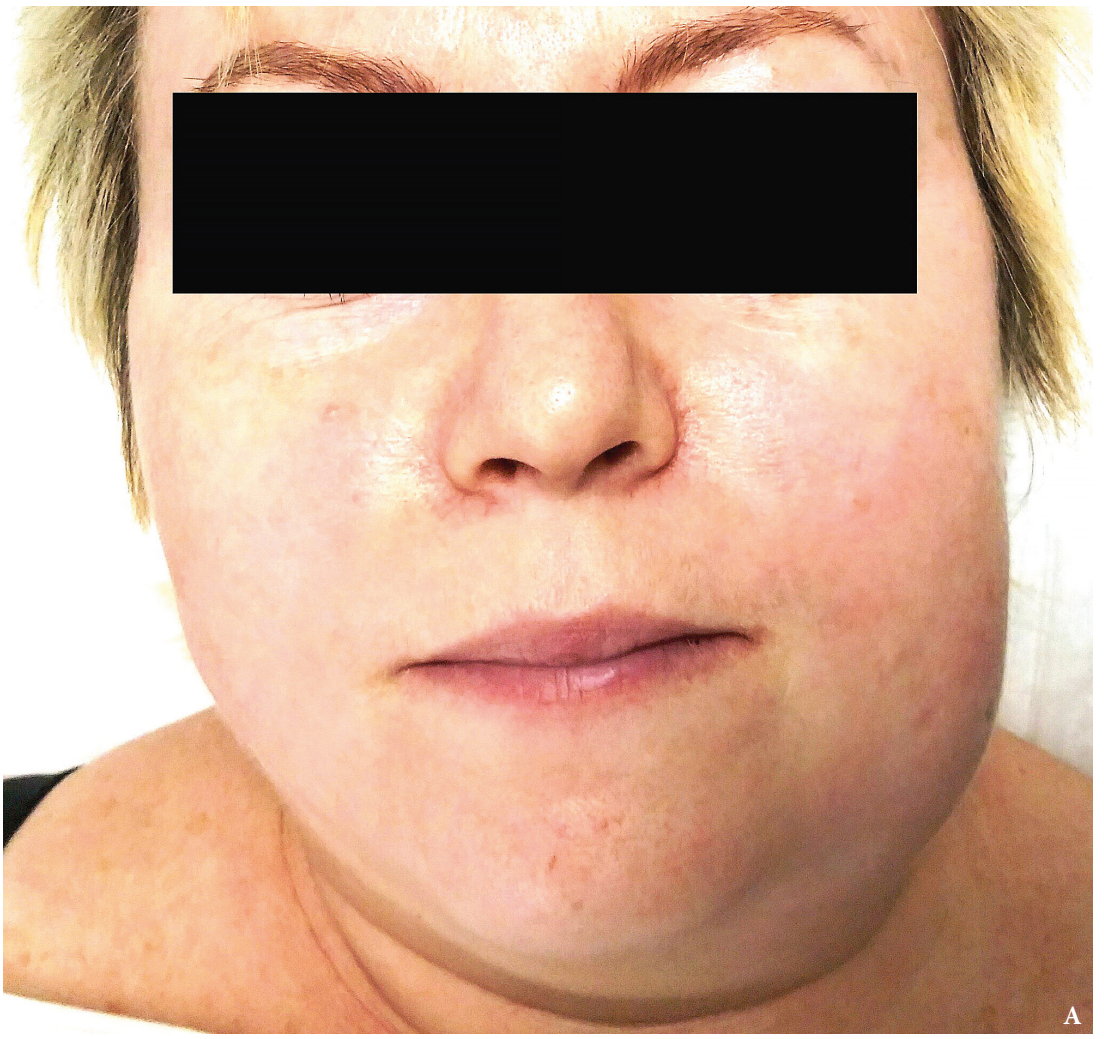

FIGURE 1. Appearance of patients with odontogenic phlegmons (**A-C**) of various localizations. **(Fig 1 continued on next page.)**

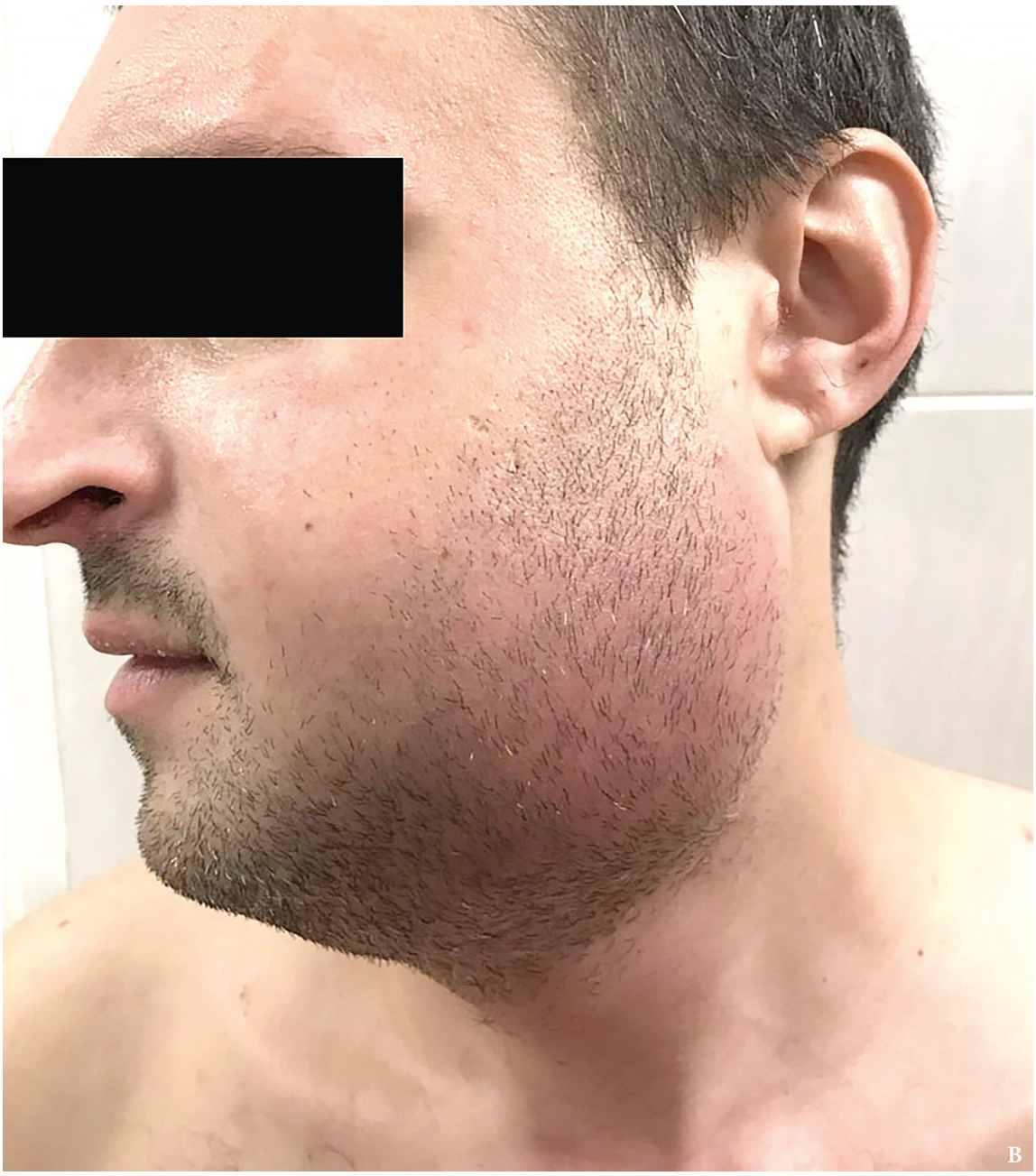

FIGURE 1 (cont'd). Appearance of patients with odontogenic phlegmons of various localizations (**A-C**). **(Fig 1 continued on next page.)**

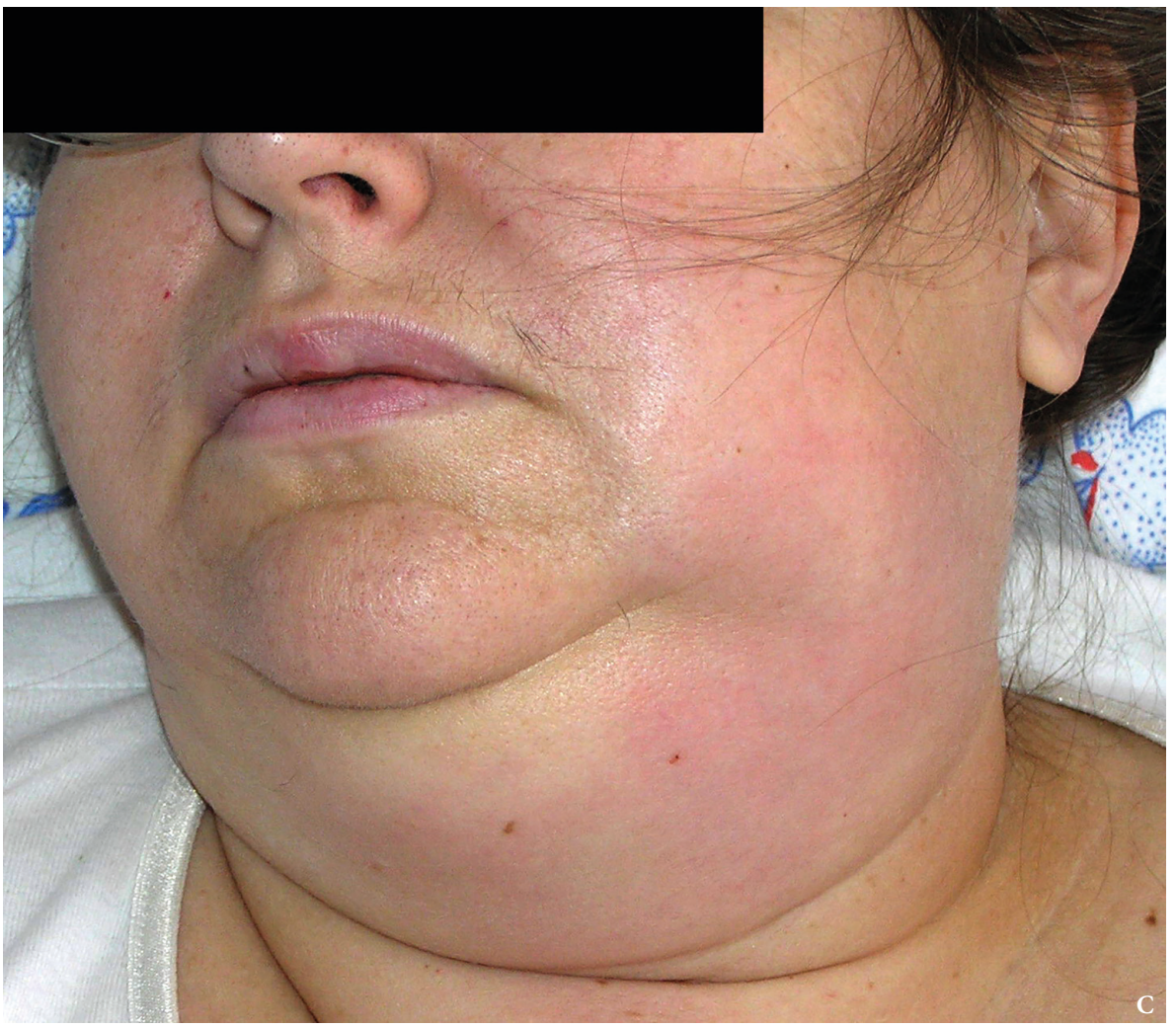

FIGURE 1 (cont'd). Appearance of patients with odontogenic phlegmons of various localizations (**A-C**).

RESULTS & DISCUSSION

Based on microbiological studies, it was established that not only aerobes (in 78.8%), but also anaerobes (21.2%) were found in patients with odontogenic phlegmon in purulent foci. Microorganisms were both in monoculture – 67.5 percent (aerobes – 56.7 percent, anaerobes – 8.8 percent), and in associations – 32.5% (only aerobes – 20 %, only anaerobes – 2.5 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 soft tissues 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 (Fig 2).

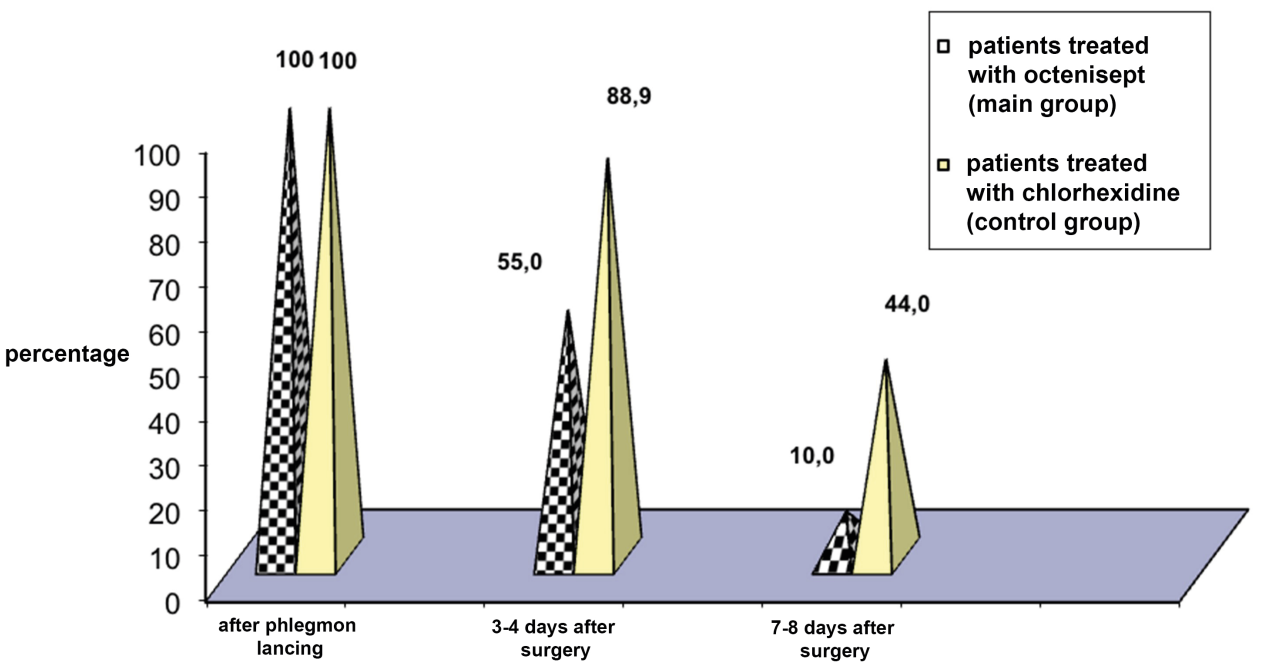

FIGURE 2. The frequency of inoculation of pathogenic microorganisms from the purulent focus in patients with phlegmon of the maxillofacial area and neck.

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 (55%), and in the treatment with chlorhexidine (control group) – in 16 patients (88.9%). 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 8 patients (44.4%).

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 (55%). For 3-4 days of treatment with chlorhexidine (control group), severe hyperemia of the purulent wound edges occurred in 14 patients (77.8 percent), and moderate – in 4 patients (22.2 percent). 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 (44.4 percent), and in the rest of the patients there was no hyperemia (55.6%).

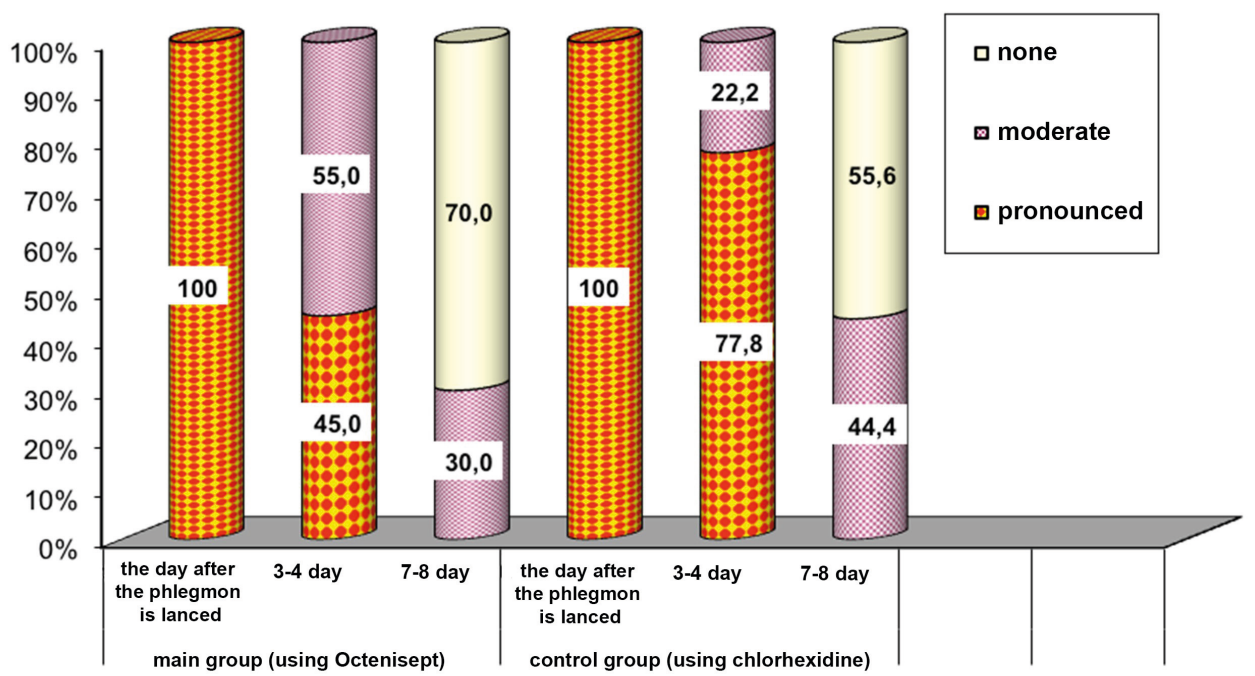

FIGURE 3. Changes in the severity of hyperemia of the purulent wound edges in patients with phlegmon of the maxillofacial area and neck in the dynamics of treatment.

Changes in the severity of inflammatory infiltration of the edges of a purulent wound in patients with phlegmon of the maxillofacial area and neck were determined in the dynamics of the treatment (Fig 4). It was established that the next day after the opening of the phlegmon, a pronounced inflammatory infiltration of the edges of the purulent wounds was observed in 100% of cases both in the main observation group and in the control group. For 3-4 days of the local treatment with the drug "Octenisept" (main group), severe inflammatory infiltration of the festering wound edges was observed in 10 patients (50 percent) and moderate in 10 patients (50.0%). For 3-4 days of treatment with chlorhexidine (control group), severe inflammatory infiltration of the edges of the purulent wounds occurred in 16 patients (88.9%), and moderate – in 2 patients (11.1%). At 7-8 days of treatment with the drug "Octenisept", moderate inflammatory infiltration was observed in 4 patients (20 percent), and in the rest – inflammatory infiltration of the wound edges was insignificant (80.0%). On the 7-8th day of the local treatment with chlorhexidine, moderate inflammatory infiltration of the edges of the purulent wounds was found in 9 patients (50 percent) and in the rest – inflammatory infiltration of the wound edges was insignificant (50 percent).

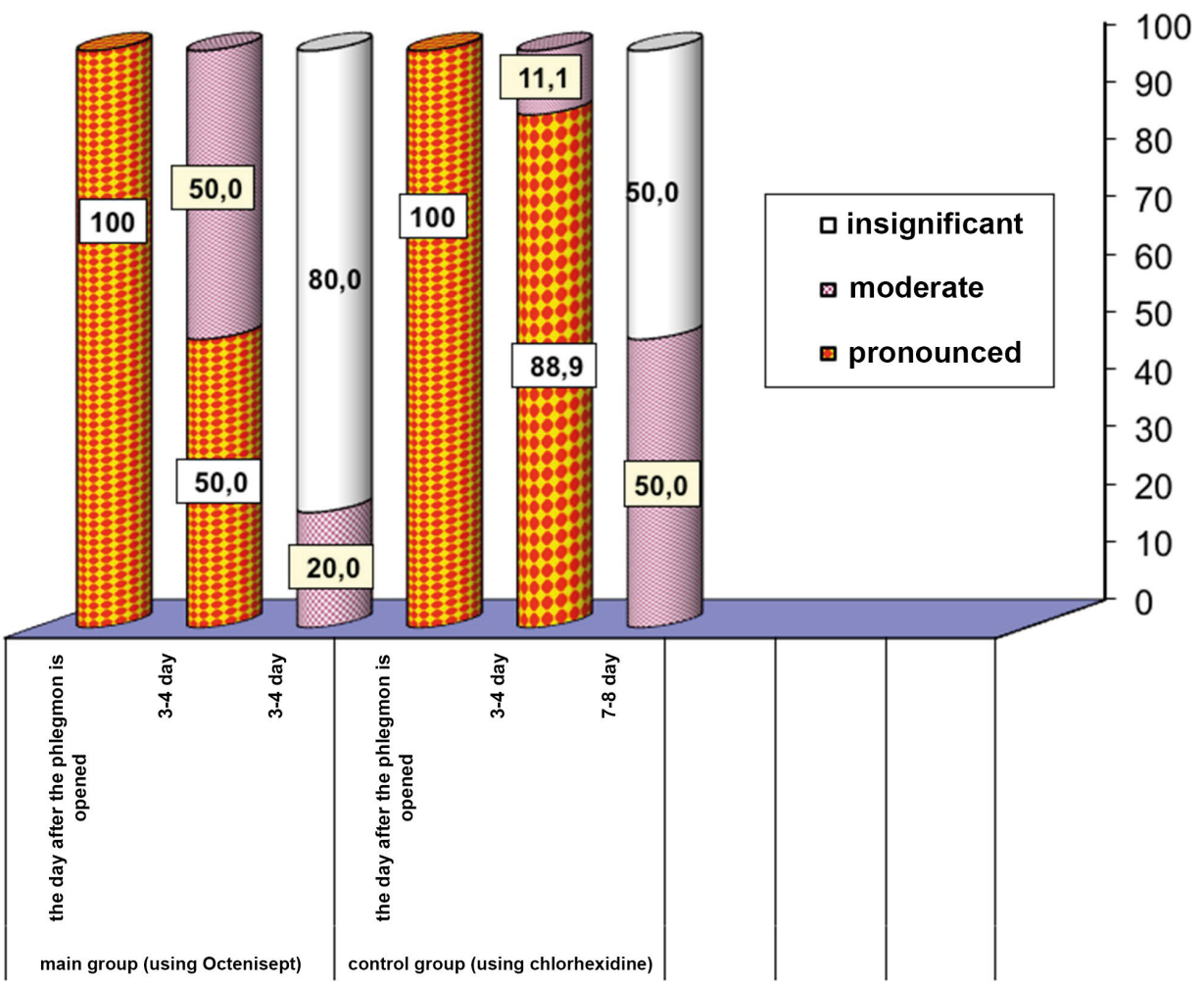

FIGURE 4. Dynamics of treatment: Changes in the severity of inflammatory infiltration of the edges of purulent wounds in patients with phlegmon of the maxillofacial and neck areas.

Changes in the severity of fibrin plaque on the walls of purulent wounds in patients with phlegmon of the maxillofacial and neck areas in the dynamics of the treatment carried out (Fig 5) were revealed. It was established that the next day after the opening of the phlegmon, a pronounced fibrin deposit of the walls of a purulent wound was noted in 100% of cases in both groups of observations. On the 3-4th day of the local treatment with the drug "Octenisept" (main group), a pronounced fibrin deposit of the purulent wound walls was observed in 12 patients (60%) and moderate – in 8 patients (40 percent). For 3-4 days of treatment with chlorhexidine (control group), a pronounced fibrin deposit of purulent wound walls occurred in 14 patients (77.8%), and moderate – in 4 patients (22.2%). At 7-8 days of treatment with the drug "Octenisept" moderate fibrin plaque of the walls of purulent wounds was observed in 4 patients (20.0%), and in the rest (80%) – fibrin walls of the purulent wounds was insignificant. On the 7-8th day of the local treatment with chlorhexidine, moderate plaque of the fibrin of the purulent wound walls was found in 9 patients (50%), and in the rest (50%) – the fibrin of the purulent wound walls was insignificant.

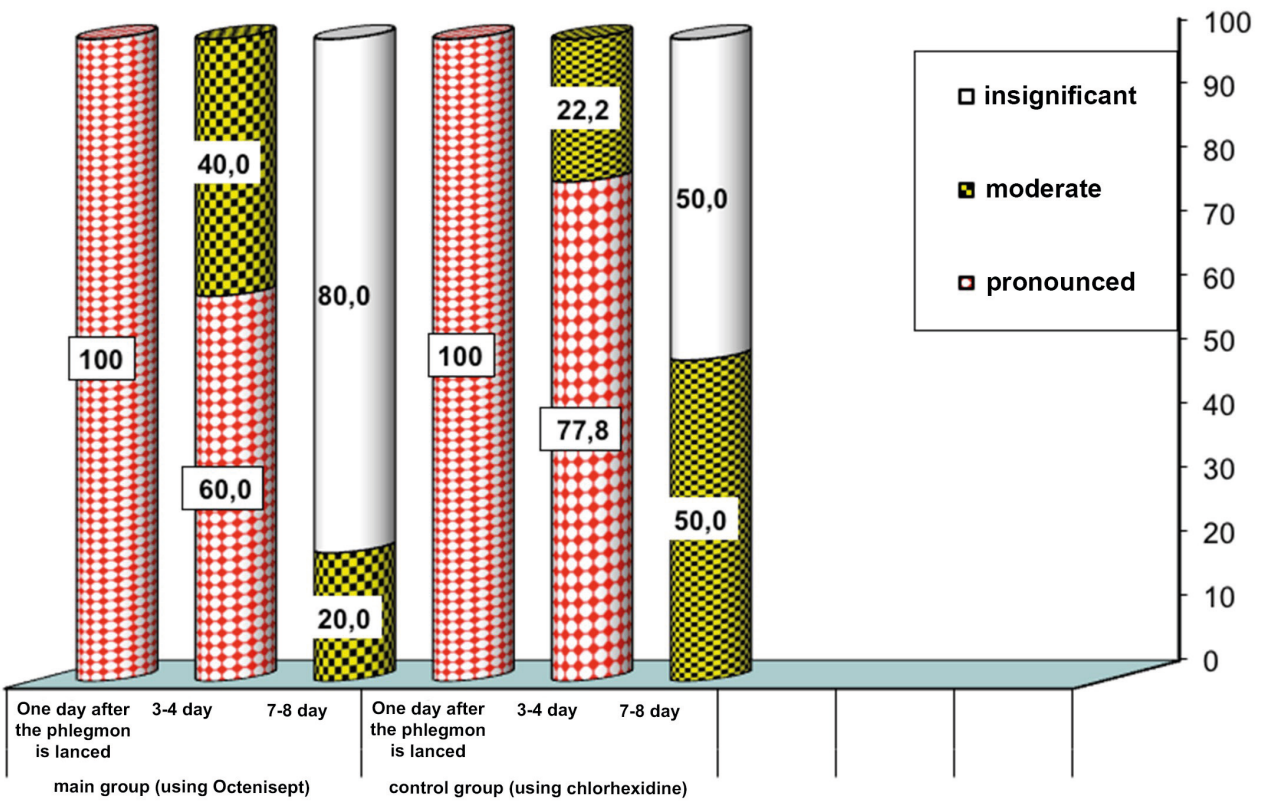

FIGURE 5. Dynamics of the treatment: Changes in the severity of fibrin plaque on the walls of purulent wounds in patients with phlegmon of the maxillofacial and neck areas.

The presence of purulent-serous impregnation of the walls of the purulent wound in patients with phlegmon of the maxillofacial area and neck in the dynamics of the treatment carried out was clarified (Fig 6). It was established that the day after the opening of the cellulitis purulent soaking of the walls of the purulent wounds was observed in 100% of cases both in the main observation group and in the control group. For 3-4 days of the local treatment with Octenisept (main group), purulent soaking of the walls of the purulent wounds was observed in 9 patients (45.0%), and serous – in 11 patients (55 %). On the 3-4th day of the treatment with chlorhexidine (control group), purulent

soaking of the walls of the purulent wounds was found in 14 patients (77.8%), and serous – in 4 patients (22.2%). On the 7-8 day of treatment with Octenisept, serous soaking of the walls of the purulent wounds was observed in 6 patients (30%), while the rest did not have the soaking of the walls of the purulent wounds (70%). On the 7-8th day of the local treatment with chlorhexidine, serous soaking of the walls of the purulent wounds was found in 8 subjects (44.4%), while the remaining ones did not have the soaking of the walls of the purulent wounds (55.6%).

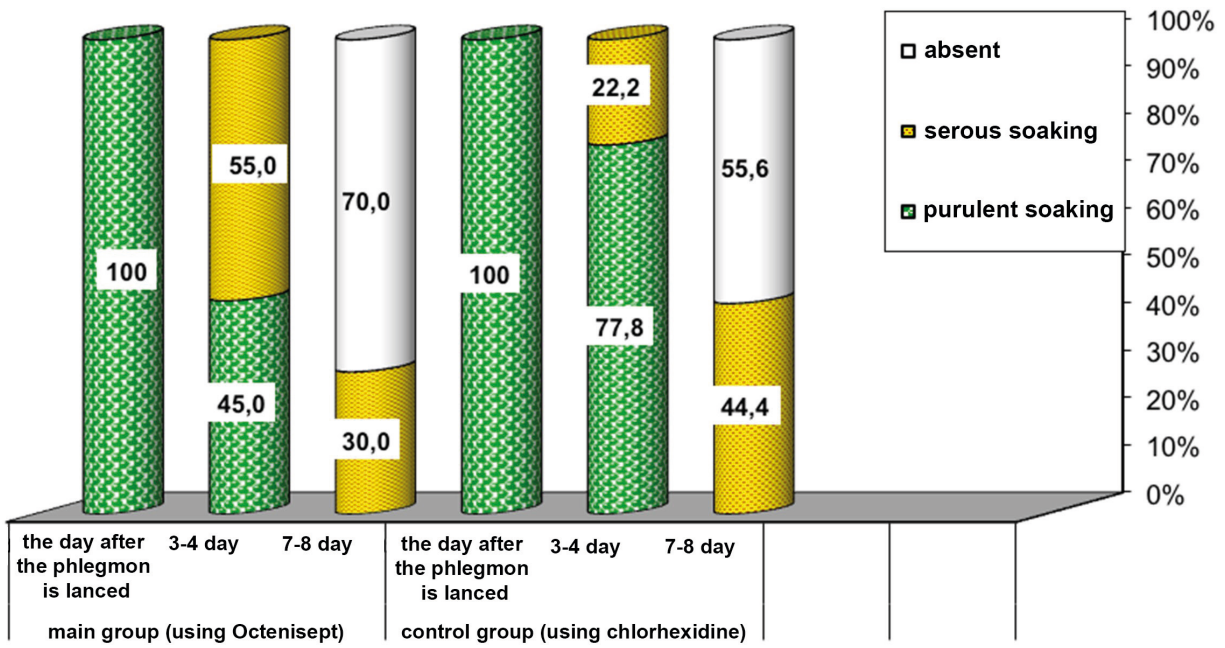

FIGURE 6. The presence of purulent-serous soaking of the walls of a purulent wound in patients with phlegmon of the maxillofacial area and neck in the dynamics of the treatment.

The presence of a discharge from a purulent wound was determined in patients with phlegmon of the maxillofacial area and neck in the dynamics of the treatment carried out (Fig 7). It was established that the day after the opening of the phlegmon, the purulent discharge from the postoperative wound 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), purulent discharge from the wound was observed in 8 patients (40.0%), and serous – in 12 patients (60%). For 3-4 days of treatment with chlorhexidine (control group), purulent discharge from the postoperative wound occurred in 12 patients (66.7%), and serous – in 6 patients (33.3%). At 7-8 days of treatment with the drug "Octenisept" serous discharge from the postoperative wound was observed in 4 patients (20 percent), and in the rest – there was no discharge from the postoperative wound (80%). On the 7-8th day of the local treatment with chlorhexidine, the serous discharge from the postoperative purulent wound was found in 8 patients (44.4%), and in the rest – the discharge from the postoperative purulent wound was absent (55.6%).

The time of appearance of granulations in the postoperative purulent wound in patients with maxillofacial phlegmon of the maxillofacial area and neck was determined in the dynamics of the treatment carried out (Fig 8). On the 3-4th day of the local treatment with the drug "Octenisept" (main group), the appearance of the first bright red granulations in the postoperative purulent wound in patients with phlegmon was observed in 3 patients (15%), and during the same periods of treatment with chlorhexidine (control group)

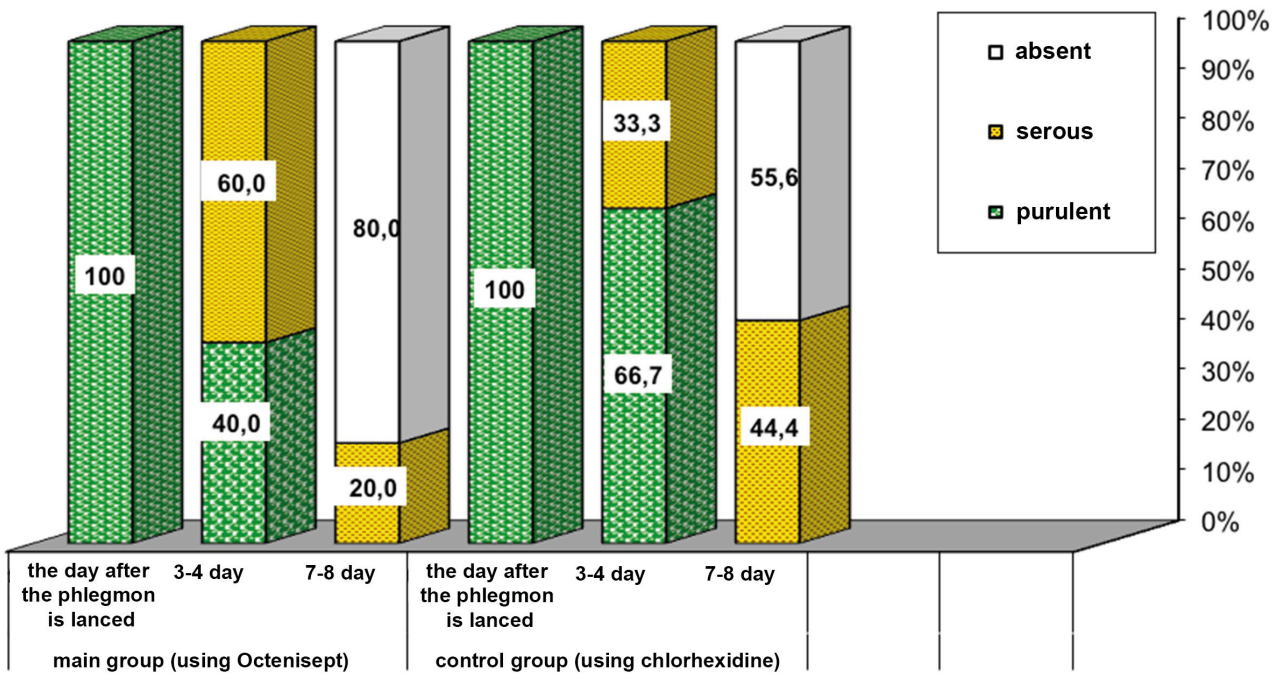

FIGURE 7. The presence of discharge from purulent wounds in patients with phlegmon of the maxillofacial area and neck in the dynamics of the treatment.

we did not reveal the appearance of similar granulations in the postoperative purulent wound in patients with phlegmon. On the 5-6th day of treatment with the drug "Octenisept", bright red granulations appeared in the postoperative purulent wound in patients with phlegmon in 14 patients (70 percent), and in the treatment with chlorhexidine – only 8 subjects (44.4%). On 7-8th day of the local treatment with the drug "Octenisept", the appearance of bright red granulations in the postoperative purulent wound in patients with phlegmon was detected in all patients (100 percent), and in the treatment with chlorhexidine – only in 14 patients (77.8%).

The terms of reducing the area of purulent wounds in patients with phlegmon of the maxillofacial area and neck in the dynamics of the treatment carried out (Fig 8) were determined. On the 3-4th day of the local treatment with the drug "Octenisept" (main group), a decrease in purulent wounds in patients with phlegmon was registered in 4 patients (20 percent), and in the same periods of treatment with chlorhexidine (control group) we had a decrease in purulent wounds revealed only in 1 patient (5.6%). On the 5-6th day of the treatment with the drug "Octenisept", the reduction of purulent wounds in patients with phlegmon was observed in 16 patients (80 percent), and in the treatment with chlorhexidine – only in 9 patients (50 percent). On the 7-8th day of the local treatment, a decrease in the purulent wound was found in all the subjects, both in the main and control observation groups.

Changes in the severity of inflammatory infiltration of perimaxillary soft tissues in patients with phlegmon of the maxillofacial area and neck in the dynamics of treatment (Fig 10) were revealed. It was established that the next day after phlegmon dissection, severe inflammatory infiltration of perimaxillary soft tissues in patients with phlegmon was observed 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 inflammatory infiltration of the maxillary soft tissues was observed in 9 patients (45%) and moderate – in 11 patients (55%). For 3-4 days of treatment with chlorhexidine (control group), severe inflammatory infiltration of perimaxillary soft tissues was found in 14 patients (77.8%), and moderate – in 4 patients

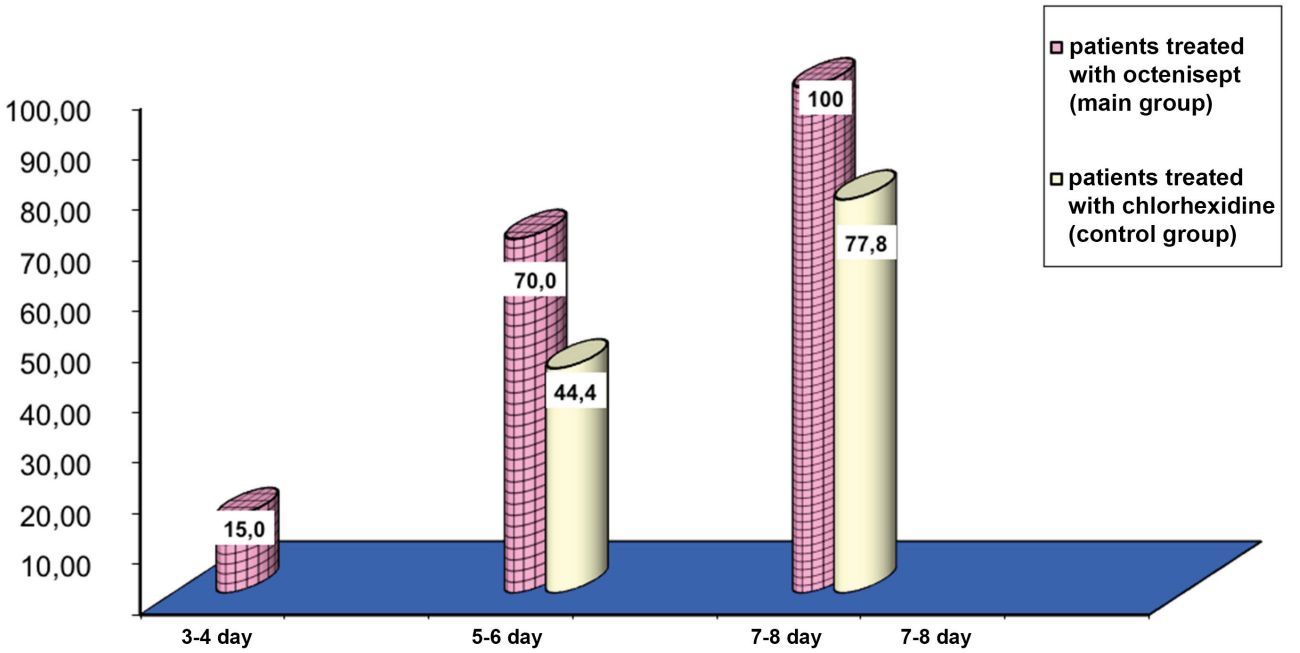

FIGURE 8. Dynamics of the Treatment: The timing of the appearance of granulations in the wound in patients with phlegmon of the maxillofacial and neck areas.

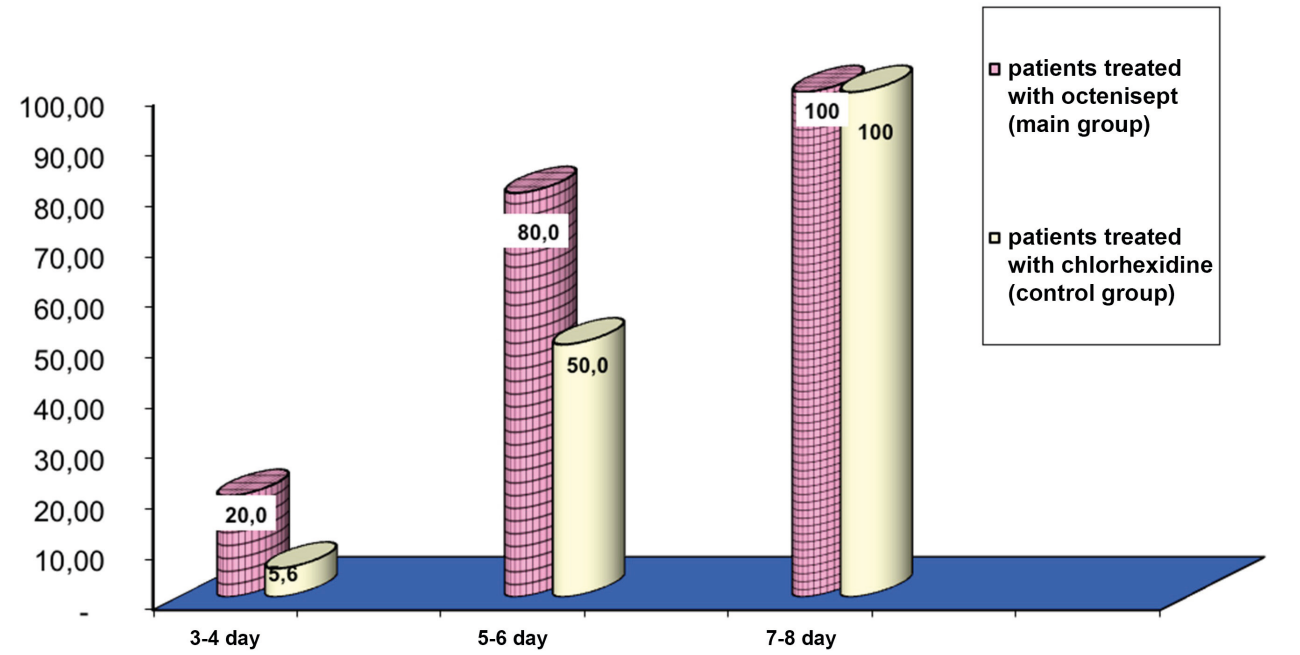

FIGURE 9. Terms of reducing the area of purulent wounds in patients with phlegmon of the maxillofacial area and neck in the dynamics of the treatment.

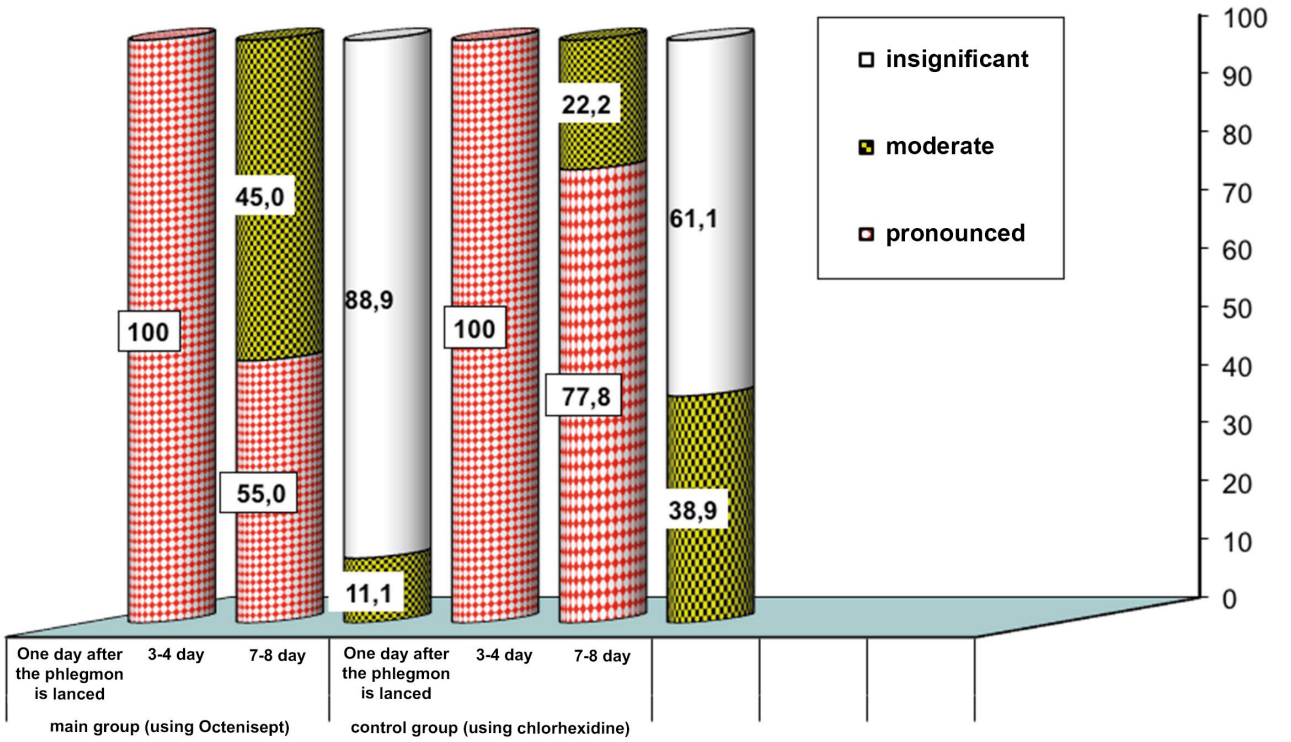

FIGURE 10. Changes in the severity of inflammatory infiltration of perimandibular soft tissues in patients with cellulitis of the maxillofacial area and neck in the dynamics of treatment.

(22.2%). On the 7-8th day of local treatment with the drug "Octenisept", moderate inflammatory infiltration of perimaxillary soft tissues was observed in 2 patients (11.1%), and in the rest – inflammatory infiltration of perimandibular soft tissues insignificant (90%). On the 7-8th day of the local treatment with chlorhexidine, moderate inflammatory infiltration of perimaxillary soft tissues was found in 7 surveyed (38.9 percent), and in the rest (61.1%) – inflammatory infiltration of perimaxillary soft tissues was insignificant.

In the main observation group (with the treatment with the drug "Octenisept") in 18 patients (90 percent) with cellulitis we managed to impose early secondary sutures on the purulent wound with 100% effectiveness. In the control observation group (chlorhexidine treatment), we managed to impose early secondary sutures on a purulent wound in 9 patients with phlegmon (50%) with an efficiency of 88.9 percent.

CONCLUSIONS

On the basis of the conducted examinations of patients with phlegmon of the maxillofacial area and neck, it was objectively proved that the antiseptic drug 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). We did not find any side effects of the drug Octenisept.

In patients with phlegmon of the maxillofacial area and neck, the medication Octenisept can be recommended for the local treatment of purulent wounds in order to prevent the development of severe inflammatory complications.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

ROLE OF THE AUTHORS

The authors are equally contributed to that paper.

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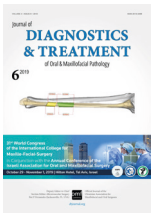

Postscriptum Editorial

Important Part of Journal`s Growth and Success: Editorial Fellowship

Igor P. Fesenko

Investment in knowledge pays the best interest.
—Benjamin Franklin
One of the Founding Fathers of the USA

Editorial fellowship[1,2] (*synonym*: editorial fellowship program[3]) is a form of education aimed to receive/improve different skills related with editorial process of the peer-reviewed journal. Usually medical journals have different fellowship`s programs.[1-3] Some of them are full-time and paid,[1] others need to devote only two to three hours per week[3] to the program. The common point is that typically the fellowships offer a yearlong editorial experience under the supervision of associate/senior editors and staff.[1, 3]

New England Journal of Medicine, publication with a highest impact factor of 79.258 in the category "General and Internal Medicine", gives beautiful chances for the fellows in reviewing and editing Images in Clinical Medicine (one of the journal`s sections) submissions and in writing special Visual Abstracts, Quick Takes, and also a blog posts, etc.[1]

An experience in radiologic journalism with Radiological Society of North America (RSNA) includes: *1)* manuscript preparation and editing, *2)* peer review process, *3)* production of the journal, *4)* printing and digital publishing.[2]

Another highly appreciated publication, the *American Journal of Transplantation* (impact factor is 7.163), is starting in 2019 an inaugural editorial fellowship program, what indicates the importance of that part of journal`s evolution.[3] This initiative gives a perfect example to the *DTJournal*`s staff how critically important is to launch their own fellowship program in the nearest future.

The most important investment you can make is in yourself.
—Warren Buffett
Third-wealthiest person in the world

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http://dx.doi.org/10.23999/j.dtomp.2019.6.4.

Future Events

for 2019-2021

2019

18th Meeting of the International Society of Craniofacial Surgery
September 16 – 19, 2019
Paris, France
www.iscfs.org

American Association of Oral and Maxillofacial Surgeons: 101st Annual Meeting, Scientific Sessions and Exhibition (Fig)
September 16 – 21, 2019
Boston, Massachusetts, USA
www.aaoms.org

31st World Congress of the International College for Maxillo-Facial-Surgery (ICMFS)
October 29 – November 01, 2019
Tel Aviv, Israel
www.icmfs2019.com

21st International Congress of the Latin American Association of Bucomaxillofacial Surgery and the Mexican Association of Oral and Maxillofacial Surgery
December 01 – December 04, 2019
Cancun, Mexico
www.cialacibu2019.com/en/welcome/

2020

25th Congress of the European Association for Cranio-Maxillo-Facial Surgery
September 15 – 18, 2020
Paris, France
www.eacmfs.org

2021

14th Quadrennial International Facial Nerve Symposium
August, 2021
South Korea
www.internationalfacialnerve.org

FIGURE. Screenshot from a website www.aaoms.org.

http://dx.doi.org/10.23999/j.dtomp.2019.6.5.

Submission of Articles

Papers for the Publication

- original papers
- clinical cases (case reports)
- surgical notes
- radiological notes
- reports of new equipment, instruments or technical innovations
- journal or book reviews
- reviews of other journals articles
- letters to the Editor

Article and Abstracts

Article must be written in English.
The authors from the Russian-speaking countries must send an abstract of the article in Russian. The authors from Ukraine must send an abstract of the article in Ukrainian and Russian.
One co-author is denominated as the corresponding author with all contact details:

- Postal address (ZIP code of a country, City, Street, phone and fax number)
- E-mail address

The abstract should include full title of the article, full names and surnames of the co-authors, affiliation, scien¬tific degree, specialty. Also the abstract should include short information about article content: purpose, material and methods, results, conclusions. Example how the Abstract should be looked like the authors can get from the published articles in current issue.

Figures and Tables

Photographs, CT and MRI images, sonograms should be submitted in original with resolution of at least 300 dpi and saved in JPEG or TIFF file format.

Fundings

The authors should indicate the sources of funding that were allocated for the preparation of the article, if such were the case.

Conflicts of Interest

At the end of the article the authors should specify about conflicts of interest (e.g., no conflict of interest).

Role of Co-authors in Writing

After specifying conflicts of interest the role of co-authors in writing of the article (concept and design of the study; material collection, mate¬rial processing, statistical data processing, writing text, editing, etc.) should be designated.

Patient Consent

Written patient consent should be obtained to publish the clinical images of the patients.

Acknowledgments

The authors can acknowledge the persons or institutions which they helped or useful in writing an article.

The Journal is recommended to use that internet source for the articles preparing according to *Vancouver References Style:* http://libguides.murdoch.edu.au/Vancouver/journal

Examples How to Form a Reference List

List all references in numerical order in the text.
Making a list of references from articles, books, internet links, etc.:

Example for the articles:

Fernandes RP, Quimby A, Salman S. Comprehensive reconstruction of mandibular defects with free fibula flaps and endosseous implants. *J Diagn Treat Oral Maxillofac Pathol* **2017**;1(1):6–10.

Example for the articles with more than three authors:

Neto AMR, Monteiro JL, Borba PM, et al. TMJ´s posterolateral dislocation with tympanic plate fracture – case report. *J Diagn Treat Oral Maxillofac Pathol* **2017**;1:59–64.

Example for the articles from the Journal Supplement:
Hammerle CH, Chen ST, Wilson Jr TG. Consensus statements and recommended clinical procedures regarding the placement of implants in extraction sockets. *Int J Oral Maxillofac Implants* **2004**;19(Suppl):26–8.

or

Hammerle CH, Chen ST, Wilson Jr TG. Consensus statements and recommended clinical procedures regarding the placement of implants in extraction sockets. *Int J Oral Maxillofac Implants* **2004**;19:S26–8.

Examples for the book chapters:

Yuen HY, Ahuja AT. Benign clinical conditions in the adjacent neck. In: Sofferman RA, Ahuja AT, editors. Ultrasound of the thyroid and parathyroid glands. Springer, **2012**:229–33.

Example for the books:

Baskin J, Duick D, Levine R. Thyroid ultrasound and ultrasound guided FNA. 2nd ed. New York: Springer; **2008**.

Example for the PhD/ScD work (dissertation for candidate/doctor of science):
Borkowski MM. Infant sleep and feeding: a telephone survey of Hispanic Americans. PhD [dissertation]. Mount Pleasant (MI): Central Micihigan University; **2002**.

Kopchak AV. Clinico-biological and biomechanical study of methods for surgical treatment of mandibular fractures. ScD [dissertation]. Kyiv: Bogomolets National Medical University; **2014**.

Example for references in Cyrillic:

Please indicate the language of writing in square brackets [Ukrainian] or [Russian].
Tymofieiev OO. Manual of maxillofacial and oral surgery [Russian]. 5th ed. Kyiv: Chervona Ruta-Turs; **2012.**
Tymofieiev OO. Diseases of the salivary glands [Ukrainian]. 1st ed. Lviv: VNTL-Klasyka; **2007.**

Examples for the internet links:

Seave A. Elsevier CEO using unique data sets and analytic processes to maintain competitive edge. The Forbes. February 25, 2016. Available at: https://www.forbes.com/sites/avaseave/2016/02/25/elsevier-ceo-using-unique-data-sets-and-analytic-processes-to-maintain-competitive-edge/#1d9e4b3979c2/. Accessed February 25, 2016.

Adult improving access to psychological therapies programme. NHS England. Available from URL:

https://www.england.nhs.uk/mental-health/adults/iapt/ (last accessed 3 March **2017**).

McManus S, Meltzer H, Brugha T, et al., editors. Adult psychiatric morbidity in England, 2007: results of a household survey. The NHS Information Centre for health and social care; 2017. Available from URL: http://www.hscic.gov.uk/catalogue/PUB02931/adul-psyc-morb-reshou-sur-eng-2007-rep.pdf (last accessed 3 March **2017**).

Example for conference paper in print proceedings:

Christensen S, Oppacher F. An analysis of Koza's computational effort statistic for genetic programming. In: Foster JA, Lutton E, Miller J, Ryan C, Tettamanzi AG, editors. Genetic programming: EuroGP 2002: Proceedings of the 5th European Conference on Genetic Programming; 2002 Apr 3-5; Kinsdale, Ireland. Berlin: Springer; **2002**. p. 182-91.

Example for conference paper from the internet:

Cloherty SL, Dokos S, Lovell NH. Qualitative support for the gradient model of cardiac pacemaker heterogeneity. In: Proceedings of the 2005 IEEE Engineering in Medicine and Biology 27 Annual Conference; 2005 Sep 1-4; Shanghai, China. New York: IEEE; **2005** [cited 2010 Sep 2]. p. 133-6. Available from: IEEE Xplore.

Example for A-V materials (DVD):

Acland RD, presenter. Acland's DVD atlas of human anatomy [DVD]. Baltimore (MD): Lippincott Williams & Wilkins; **2004**.

Example for A-V materials (YouTube/Vimeo video):

NRK. Medieval helpdesk with English subtitles [video file]. **2007** Feb 26 [cited 2014 Jan 28]. Available from:http://www.youtube.com/watch?v=pQHX-SjgQvQ

Example for A-V materials (Video recording):

Hillel J, writer. Out of sight out of mind: indigenous people's health in Australia [videorecording]. Bendigo: Video Education Australasia; **2003**.

Example for Readers/Study Guides:

Lynch M. God's signature: DNA profiling, the new gold standard in forensic science. Endeavour. 2003;27(2):93-7. Reprinted In: Forensic Investigation (BIO373) unit reader for forensic DNA component. Murdoch (WA): Murdoch University; **2005**.

Example for newspaper articles in print:

Hatch, B. Smoke lingers for those who keep hospitality flowing. Australian Financial Review. **2006** Jul 13: 14.

Example for newspaper article from the internet:

Devlin, H. Neuron breakthrough offers hope on Alzheimer's and Parkinson's. The Times [newspaper on the Internet]. **2010** Jan 28 [cited 2010 Jan 31]. Available from: http://www.timesonline.co.uk/tol/news/science/medicine/article7005401.ece.

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Questions?

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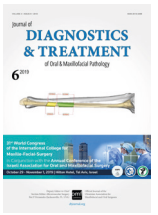

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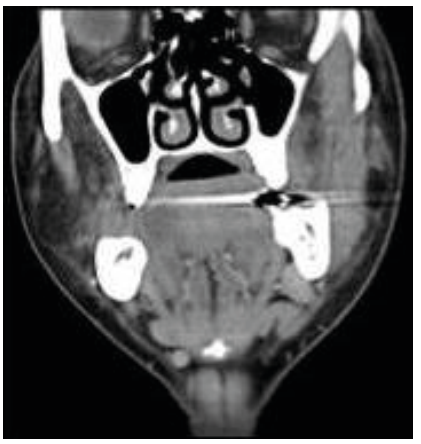

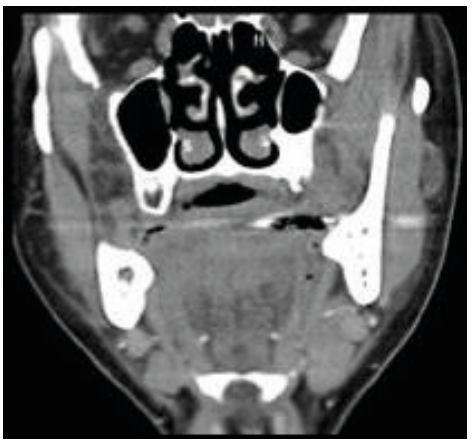

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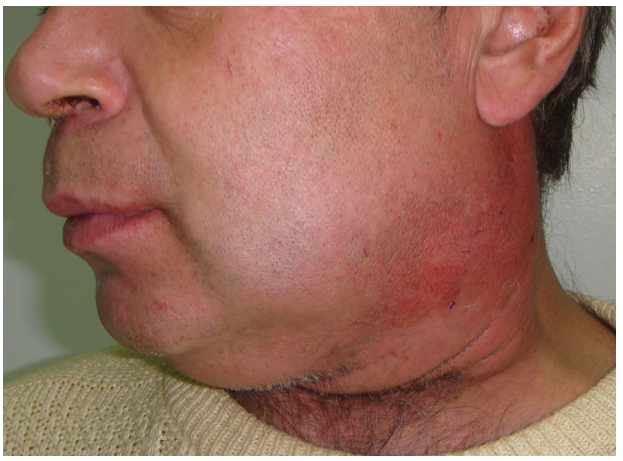

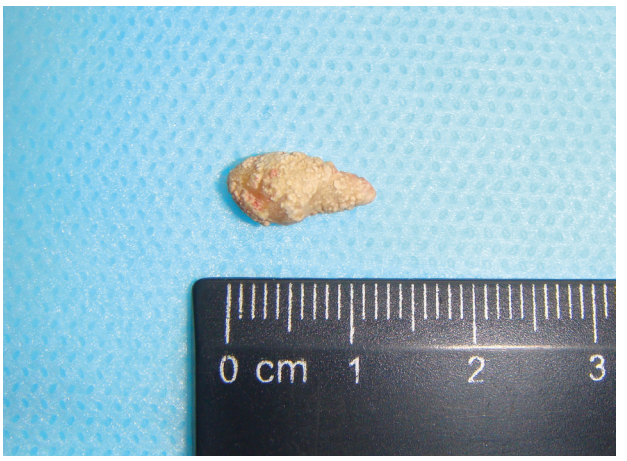

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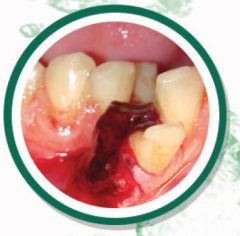

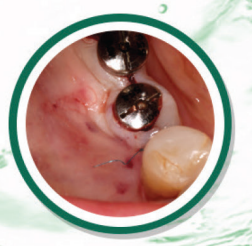

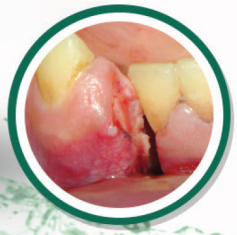

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