

## COMPARATIVE ESTIMATION OF THE REMOTE RESULTS OF OPERATIVE TREATMENT OF PATIENTS WITH COMMON PHLEGMONS OF MAXILLOFACIAL AREA

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✓ **Resume,**

*The application of secondary sutures to purulent wounds after they have been cleansed of necrotic masses and the appearance of granulations allows to eliminate cosmetic defects of postoperative wounds and is aesthetically very acceptable for maxillofacial surgeons, as an improved indicator of treatment of patients.*

**Key words:** odontogenic inflammatory, maxillofacial area, phlegmons, mediastinitis, scar, wound, anaerobic microorganism, purulent process, postoperative, complication, organism, solution, application, povidone-iodine, Betadyne, substance, iodoform, patient.

## СРАВНИТЕЛЬНАЯ ОЦЕНКА ДИСТАНЦИОННЫХ РЕЗУЛЬТАТОВ ОПЕРАТИВНОГО ЛЕЧЕНИЯ ПАЦИЕНТОВ С ОБЩИМИ ФЛЕГМОНАМИ МАКСИЛЮ-ЛИЦЕВОЙ ОБЛАСТИ

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✓ **Резюме,**

*Применение вторичных швов к гнойным ранам после их очистки от некротических масс и появления грануляций позволяет устранить косметические дефекты послеоперационных ран и является эстетически очень приемлемым для челюстно-лицевых хирургов, как улучшенный показатель лечения пациентов.*

**Ключевые слова:** одонтогенное воспаление, челюстно-лицевая область, флегмоны, медиастинит, рубец, рана, анаэробный микроорганизм, гнойный процесс, послеоперационный период, осложнение, организм, раствор, аппликация, повидон-йод, бетадин, вещество, йодоформ, пациент.

## AVFSIZLIK YO'QLARINING RAQAMLI FLEGMONLARI BILAN BOSHQARUVNI OPERATIV DAVOLASHNI NATIJALARINI QIYOSLASH

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✓ **Rezyume,**

*Ikkilamchi choklarning yiringli yaralarga nekrotik massalardan tozalanganidan keyin qo'llanilishi va granulalarning paydo bo'lishi operatsiyadan keyingi jarohatlarning kosmetik nuqsonlarini bartaraf etish imkonini beradi va bemorlarni davolashning yaxshilangan ko'rsatkichi sifatida jag'-jag' jarrohlari uchun estetik jihatdan maqbuldir.*

**Kalit so'zlar:** odontogen yallig'lanish, jag'ning yuzasi, flegmonlar, mediastinit, chandi, yara, anaerob mikroorganizm, yiringli jarayon, operatsiyadan keyingi davr, asorat, organizm, eritma, qo'llash, povidon-yod, Betadin, modda, yodoform, bemor.

### Introduction

The problem of development of complications odontogenic inflammatory processes of maxillofacial area (MFA), despite introduction of new modern methods of preventive maintenance and treatment continues to remain topical. The special attention of clinical physicians and researchers involve complications of poured phlegmons MFA (mediastinitis) as their operative treatment often leads to formation rough, keloid scars.

As operative treatment of common purulent processes of the soft tissues MFA caused by anaerobic microorganisms, is conduct by carrying out like "strip" cuts and counter apertures, it leads to formation of rough postoperative scars. Availability of extensive scars in the field of aesthetically important zones: face, neck, area of the neckline breaking an aesthetic kind of patients, leads to infringement of the psycho emotional status of patients. They become closed and avoid public place, social

adaptation of such patients worsens. Therefore, we have considered necessary to optimize regenerative processes in postoperative wounds for the purpose of improvement of an aesthetic kind of postoperative scars. Capability to regeneration - property of live system, which represents the adaptive process develop during the evolution and inherent all live organisms. From ancient time, the person tried to reduce wound surface, to prevent additional pollution and a mechanic trauma. Now the problem of healing of purulent postoperative wounds and creation of optimum conditions for improvement of regeneration of soft fabrics, despite achievements of clinical and experimental medicine, continues to remain relevant.

Important aspect in treatment of purulent wounds and their complications in a surgical hospital is local treatment by means of local forms of antibiotics and local antiseptics. (12, 16, 17).

Now a considerable quantity of the antiseptics possessing quite good bactericidal properties (18) known.

However, recently results of researches show that some of microorganism's strains become steady against many antiseptics (aqueous chlorhexelin solution, potassium permanganate solution, furatsilin). In this connection search of the new preparations promoting faster clarification of purulent wounds actively led. Therefore, more and more wide application found well to us by known preparations of iodine, and in particular, it is various complex connections. The special attention deserved by preparation of "Betadyne" (pharmaceutical company "Egis", Hungary). This iodoform is an antiseptic of a wide range of the action, possessing bactericidal and anti-virus properties (13) biologically active substance of a preparation - povidone-iodine (in the form of complex polyvinylpyrrolidone iodine) which antimicrobial effect caused by oxidative damage and blocking of a membrane of a cage of a microorganism. Povidone-iodine is widely used in surgical practice already more than 30 years, since 70-80th years of the last century (19)

"Beta dynes" which antimicrobial action as it has already been told above, based on damage by iodine of a cellular wall of pathogenic microorganisms at the expense of oxidation of amino acid of the bacterial fibers, containing SH - and ON-groups is the antiseptic and disinfectant preparation. It is bacterial enzymes and transmembrane protein. At oxidation changes, their quaternary structure and they lose catalytic and enzyme activity. Connection of iodine with polyvinylpyrrolidone - the synthetic polymer which is not possessing toxic and antigenic properties, which is capable to attach reversible other substances, such as medicinal toxins, preparations, hormones (13). In a complex with polyvinylpyrrolidone iodine loses property to cause burning sensation during application, but keeps high bactericidal activity that has allowed to expand areas of its application as an antiseptic. Because of the polymeric molecule, iodine gets deeply into a wound, into inflamed tissue and under a scab. "Betadynes" renders of a common antimicrobial action, showing high activity in relations gram negative (*E. coli*, *K. pneumoniae*, *Mycobacterium tuberculosis*, *Neisseria gonorrhoeae*, *Proteus spp.*, *Ps. aeruginosa*, *Salmonella typhi*, *Shigella spp.*), gram positive microorganisms (*Bacillus subtilis*, *Clostridium perfringens*, *Clostridium tetani*, *Propionibacterium acnes*, *S. aureus*, *Str. pyogenes*), mycoses (*Aspergillus niger*, *Candida albicans*, *Microsporium audouinii*, *Nocardia spp.*, *Penicillium spp.*, *Triphophyton spp.*) and also spore-forming floras, some viruses (20,23). That fact is especially important that despite the long period of application of povidone-iodine in surgical practice most often meeting activators of infections have not acquired to this preparation stability (20, 24, 25, 26, 27).

In comparison with other antiseptics, the preparation of "Betadynes" possesses a number of important advantages:

- keeps antiseptic properties during the long period of a finding on a skin;
- keeps high antiseptic properties even in the presence of blood and plasma;
- does not cause development of resistant forms of microorganisms;
- will well dilute in water;
- it is not toxic at long and frequent application;
- Causes allergic reactions and it is steady at storage of seldom.

"Betadynes" it is show to application for preventive maintenance of infectious complications in following clinical situations (13)

The purpose: Studying of the remote results of imposing of secondary seams on the extensive postoperative wounds which have arisen at treatment of common purulently-inflammatory diseases MFA with local application of a preparation of "Betadynes"

### Materials and methods

On chair of surgical dentistry in department of maxillofacial surgery of the Bukhara regional versatile medical centre clinical-laboratory investigation 35 patients with extended odontogenic phlegmons MFA and neck. All patients hospitalized on emergency to indications, in day of receipt by it produced opening of phlegmons with wound drainage and removal of causal teeth.

Patients divided on two groups. In I- control group include, 10 men and 6 women from whom at 4 sick phlegmons have become complicated mediastenitis, treated by traditional methods have entered: washing of a purulent wound by a solution furatsilin (1:5000) and 3 % a solution of peroxide of hydrogen and drainage.

II basic group included 12 men and 7 women from who at six patient's purulent process has become complicated mediastenitis. The patient of this group after surgical intervention during dressings locally into a wound entered an antiseptic of Betadynes by wetting of gauze napkins by it and in 15 days after operation when the wound was cleared from necrotic masses and in it there were granulations, after preliminary mobilization of edges of a wound, imposed on it secondary seams. Dressing conducted by 2 times a day, before the termination of the purulent separated. Results of treatment estimated based on the given clinical, laboratory and bacteriological researches.

### Results and discussion

At patients of the basic group in comparison with patients of control group the postoperative scar was the most aesthetic and hardly noticeable, at them intensity regression occurred of local signs of an inflammation - a hypostasis, hyperemia, local pains. At the basic group of patients for 2-3 days clarification of a wound at the expense of tearing away necrotic tissue fast observed and the termination of allocation of pus, there was a reduction of intensity of pains, hypostasis fall in comparison with patients of control group faster. At the basic group of patients thanks to the accelerated clarification of a wound from necrotic tissue and, thereby, to sharp reduction of receipt in an organism of bacterial toxins, the general state of health (the dream normalized, headaches etc. disappeared) much earlier improved body temperature normalized. From analyses of blood at patients of the basic group level of the maintenance of leukocytes, leukocyte intoxication index much fast normalized. In all patients surveyed by us by results of bacteriological researches have been found out of piogenic microorganisms (*staphylococcus*, *streptococci*, *escherichia*, *clostridia*, etc.). By all patients conducted antibacterial, desensitizing, detoxification and reinforcing treatments. Results of supervision over patients in dynamics have shown that local application of a preparation of "Betadynes" promoted faster allocation from a wound anaerobes and aerobes, granulations in a wound appeared for 2-5 days earlier, than at patients of control group. Besides, after some months after hem healing, at patients of the first group availability

big normotrophic or keloid scars that is at the bottom of repeated circulation of patients behind medical aid for the purpose of improvement of the aesthetic kind at the expense of liquidation of cortical deformations is noticed. As the patient of the basic group during treatment imposed secondary seams on wounds, after their healing formation of hardly noticeable scars in aesthetically important zones was observe the face, a neck.

Thus, it is possible to draw a conclusion that imposing of secondary seams on purulent wounds after their clarification from necrotic masses and occurrence of granulations allows eliminating cosmetic defects of postoperative wounds and in the aesthetic relation is very acceptable for maxillofacial surgeons, as the improved indicator of treatment of patients. High clinical and bacteriological efficiency in a combination to a high profile of safety speak about necessity of wider application of an antiseptic preparation of "Betadynes" for surgical practice.

#### REFERENCES:

1. Gorunov S.V., Romashov D.V., Butivshenko I.A., Purulent surgery. Atlas. M: binomial 2004; 133.
2. The selected rate of lecture on purulent surgery. Under the editorship of V.D.Federova, A.M.Svetuxina. M:Miklosh 2007; 204-217.
3. Kolesov A.P., Stolbov A.V., Kocherovets V. I, Anaerobe infection surgeries. L: Medicine 1989.
4. Cusin of M. И, Kostuchenok B.M. Wound and wound's infection. M: Medicine 1990; 397.
5. Lickhaupt H., Ahrens A. Anaerobic infection. Kopf. Halsberech. HNO 1993; 4:41.
6. Paul Hartmann A.G. Methodical management on treatment of wounds. M: Paul Hartmann 2000; 106
7. Gavoronsky T.V. Optimization of treatment of patients odontogenics phlegmone maxillofacial area: Dissertation □ Dr.s of medical sciences. M:2008; 49.
8. Gubin M. A, Haritonov J.M Result of studying of complications sharp odontogenic infections at dental patients. Russian dental magazine. 2005; 1:10-15.
9. Shargorodskiy A.G. (ред.). Inflammatory diseases of maxillofacial area and a neck. M: Medicine 2001; 351.
10. Shulakovi V. V, Tsarev V. N, Birulev A.A. Parallel of clinical displays odontogenic purulent inflammatory diseases and dominating etiopathogenetic factors (a part II) clin/dent. 2008; 76-79.
11. Ershov. A.K. About application of a preparation of "Betadynes" in surgical practice.
12. Belozer A.A., Smirnov O. A, Petkova V. A. The infectious control of intrahospital infections in a hospital of the first help. The collection of materials of 3rd Russian scientifically-practical conference "Modern problems of etiology, diagnostics and preventive maintenance of intrahospital infections". SPb., 2003; 75-7.
13. Blatun L.A. modern iodine - effective preparations for preventive maintenance and treatment of infectious complications. Consilium medicum. 2005, volume 7 №1.
14. Cusin of M. I, Kostuchenok B. M, Kolker I.I., etc. Anaerob unclostridial infection in surgery (methodical recommendations). M, 1987; with 29.
15. Geissler A, Gerbeaux P, Granier I et al. Rational use of antibiotics in the intensive care unit: impact on microbial resistance and costs. Intensive Care Med 2003; 29 (1: 49-54).
16. Langer S, Sedigh Salakdeh M et al. The impact of topical antiseptics on skin microcirculation. Eur J Med Res 2004; 9 (9: 449-54).
17. Surgical infections / management. I.A.Erjuhina, B.R.Gelfand, S.A.Shlapnikova's edition. M. - 2003. - 854 with.
18. L.A.Blatun. Local medicamentous treatment of wounds. Problems and new possibilities of their decision //Consilium Medicum. Surgery. - 2007; 9(1).
19. Bulynin V. I, Gluhov A.A., Moshurov I.P. Treatment of wounds. / Voronezh. - 1998; 248: 6.
20. A methodical management on treatment of wounds: the Lane with it. / Under the editorship of G.Herman. - the physician, 2000; 123: 7.
21. Osipov I.S., Leonov S.V. Use of antimicrobic means of "Betadynes" in surgical clinic. M: "Egis" - 1990; 3: 7-10.
22. Zamora J.L. Povidone-iodine and wound infection.//SURGERY - 1984; 95: 121-122.
23. Zellner P.R. and Bugyi S. Povidone-iodine in the treatment of burn patients. -//Journal of Hospital Infection, 1985; 6: 139-140.
24. Stohes EJ, Howand E, Peters JC et al. Comporison of Antibiotic and Anticeptic Prophylaxis of wound infection in Acute Abdominal surgery. World J Surg 1977; 7(6): 777-82.
25. Shelling CF. Comparative evolution of pouvidon - iodine aerosol, foam, solution and silver sulfadiazine cream as prophylactic topical antibacterial agents for treatment of the burn wound. Burns 1980; 7(2): 143-9.
26. Surgical infections of a skin and soft fabrics. The Russian national recommendations. / a management under V.S.Savelyev's edition. M - 2009; 89: 7.
27. Mihalsky B, Gorunov S.V., Bogdanov A.E., Zilina S.V., Prividentsev A.I., Anikin A.I., Ulanina A.A. / Application of a preparation of "Betadynes" in treatment of the infected wounds. //Russian medical magazine. Surgery. Urology - 2010; 18(29): 1780-1788.

Entered 09.04. 2020