

RESULTS OF ACUPUNCTURE IN COMPLEX THERAPY FOR PATIENTS WITH ACQUIRED DEFECTS OF LOWER JAW ON THE ORAL FLUID MICROCRYSTALLIZATION FINDINGS

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Introduction

Last years quantity of traumatic fractures of lower jaw increased and is in range from 67,4% to 85% as well as quantity of that bone neoplasm [4,10]. In spite of successful crano-maxillofacial operations for tumor defects of lower jaw replacement with allogenic orthotopic transplants, problem of graft rejection while and after treatment and rehabilitation procedures, remain actual [1,8]. It deals with patients whose lower jaw was to be restored after gunshot wound and transplantation is to be performed when scars of soft tissue changed and blood flow is also changed. We found informations in special medical issues that human body resistance level is very important for effectiveness prophylaxis procedures of described above complications as well as patients providing with goods conditions for posttraumatic reparative bone tissue regeneration [11].

Ordinary treatment of pathology mentioned above is impossible because of allergization of population, increasing number of cardiovascular diseases, not wide application of physiotherapy procedures. So, is necessary to elaborate new system of rehabilitation procedures for those patients. Special medical literature says that acupuncture treatment could be used for normalization of homeostatic balance of human body for patients with somatic and crano-maxillofacial diseases [5,7].

Our days, great attention is paid for studying of human body medium (blood serum, oral fluid) in osteogenesis. According to different articles, microcrystallization of oral fluid is more informative index of homeostasis. Many researchers fixed that index change for patients with crano-maxillofacial diseases [2,9]. Facts above confirm subject of this research is important.

Aim of research

is to study how microcrystallization indices of oral fluid for patients with acquired defects of lower jaw are changing while postoperative treatment combined with acupuncture.

Objects and methods

We examined 35 patients at the age of 27-48 years old with acquired defects of lower jaw, the bone was broken.

All patients were subjected into plastic operation with allogenic transplant. Patients of the I group (18 patients) have got ordinary treatment course postoperatively. Postoperative treatment of the patients of the II group (17 patients) was combined with acupuncture procedures. Group of control consisted of 30 healthy persons at the same age. All patients have got treatment course with antibacterial and anesthetic medicines, had careful dental care. The wound was pricked all round with solution which consists of suspension of 30 mg hydrocortisone, 30% lincomycin solution – 2 ml, 2% lidocaine solution - 2 ml. Patients were treated with «Osteogenone» 7 days after operation. After intermaxillary rubber tie is taken off, mechanotherapy was applied for lower jaw and temporomandibular joint care. We have stimulated the following acupoints for the patients of the II group: 1) general acupoints - LI4, LI10, LI11, St36, TH1, TH5, GB20, GV14, GV20, GV25, GV26, CV24; 2) local acupoints – LI18, St5, St6, St7, St44, SI18, SI19, TH4, GB37, GB40, GV1, GV28 and extrameridional acupoint PC18 [6]. Acupuncture procedures were applied for: 1) anesthesia course during the operation; 2) postoperative acupuncture course consisted of 10-12 sessions performed every day. Second sedative method was used for acupoints stimulation. Microcrystallization level was performed by methods of P.A. Leus (1977) [3]. First examination was performed when patients went in clinic, 2-nd – during first day postoperatively, 3-rd - 7 days after operation, 4-th - 14 days after operation, 5-th – 21 days after operation, 6-th - 1 month later, 7-th – 6 months postoperatively. Indices we collected during examinations were processed with method of calculus of variations.

Results

According to the received results we have concluded that indices of microcrystallization for patients of the I ($2,2 \pm 0,2$) and II groups ($2,1 \pm 0,1$) were different ($p < 0,02$) from control indices ($1,5 \pm 0,2$). Positive changes of indices $1,8 \pm 0,1$ ($p < 0,05$) were fixed by 21 day of treatment for 56% of patients receiving ordinary treatment course. There was no change of health for 44% of patients (FIG.1). Positive changes of indices of microcrystallization $1,6 \pm 0,1$ ($p < 0,001$) for II group patients was fixed by 14 days for 75% of patients, by 21 days – $1,52 \pm 0,1$ ($p < 0,05$) it consisted 89% (FIG.2). Clinical tests confirmed marked indices.

First day after operation all patients had edema of soft tissue of cheek, parotid-masticatory and submandibular regions. We used drainage to get ichor from the wound. Bone and transplant mobility were not identified. Negative results had 44% of patients of the I group. These patients had tissue infiltration in the region of the wound by 7–10 days. There was ichor of big quantity in scar tissue than graft was rejected. Results were confirmed by indices of tests of microcrystallization in 100% of cases. Patients of the II group had no complications mentioned above what corresponded to indices of tests of microcrystallization in 89% of cases. These was no edema of soft tissue for that patients by 21 days and 1 month. Bone and transplant mobility were not identified.

Conclusion

Complex treatment including acupuncture stimulation is effective for patients with acquired defects of lower jaw after operation with allogenic orthotopic transplant. Acupuncture treatment could be advised for wide use in maxillofacial surgery.

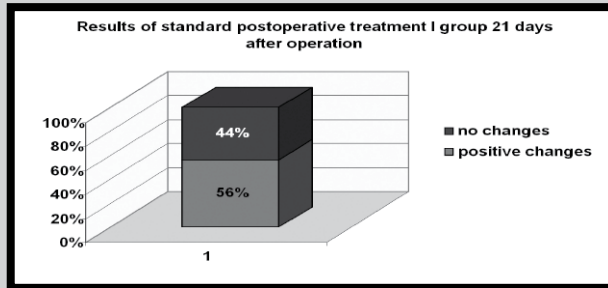


FIG.1. Ordinary postoperative treatment for patients of I group according to the microcrystallization indices of oral fluid by 21 days.

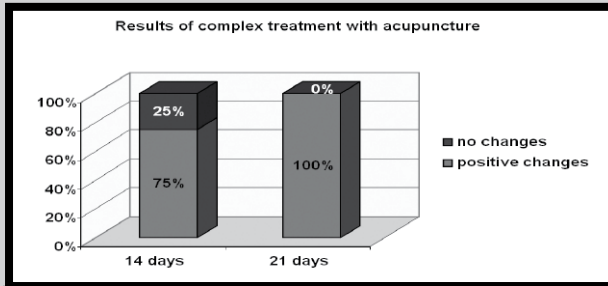


FIG.2. Postoperative treatment combined with acupuncture for patients of II group according to the microcrystallization indices of oral fluid by 14, 21 days.

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PROGNOSTIC CRITERIA FOR DEVELOPMENT OF CHRONIC ODONTOGENOUS SINUSITIS OF MAXILLARY SINUS

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Introduction

Last decades, diagnostics and treatment of odontogenous sinusitis of maxillary sinus are studying and improving. Aetiology, pathogeny, clinical characteristics and treatment methods are lighted well in medical literature. In spite of that quantity of patients with odontogenous sinusitis is not reducing. That disease makes up 3-7% of the total amount of surgical pathologies of maxillofacial area [8] and 5-12% of patients in stomatological surgical clinics [1]. Odontogenous sinusitis of maxillary sinus is its mucous tunic inflammation appearing from nidus of chronic odontogenous infection when patient has apex periodontium of upper bicuspid and bicuspid. Bone tissue is destroying for many patients with this disease and its layer between root apex of mentioned teeth and maxillary sinus become weak. Those circumstances as well as individual anatomic structure do the base for mouth floor perforation during operation on tooth extraction. Sometimes, they press the fang into maxillary sinus or under mucous tunic what form 33,1% of all sinusitis of maxillary sinus. I.O.Pohodenko-Chudakova and A.Z.Barmutskaya (2007) [7] analysed 146 cases histories for patients treated during 2005 - 2006 for iatrogenic complications. It is to underline foreign bodies of maxillary sinus were found for 81 patients. Filling material was found in 51,1% of cases, teeth and fangs - in 43,2%, implants - in 3,4%, drainage - in 2,3%. Infected foreign body in maxillary sinus causes chronic inflammatory process with polypus proliferation of mucous tunic in 54,4% of cases [9]. Sensitization of human body to the nidus of chronic odontogenous infection, allergic reaction and reducing of common body resistance provoke disease. At the same time, hard tooth tissues, maxillary bone tissue, soft mouth tissues are in dynamic balance with oral fluid. Arising and developing diseases of maxillofacial area can break human homeostasis what is confirmed by quantitative and qualitative indices of oral fluid, physical indices - microcrystallization. Many authors say about positive changes of microcrystallization indices during treatment of maxillofacial diseases [3,6]. In some manuscripts they say that test is informative for prediction of pyoinflammatory diseases development of odontogenous aetiology [2]. But there is no information regarding compative appreciation of effectiveness for integral leukocyte and microcrystallization indices application for prediction of development of chronic odontogenous sinusitis maxillary sinus.