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Dentistry

CLINICAL-MORPHOLOGYCAL CHANGES OF THE ORAL CAVITY IN HBV AND HCV INFECTIONS

2017 Science week

Conference Abstracts

November 27th – December 1st

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Introduction. Viral hepatitis remain the most important and actual problems of contemporary medicine which is determined by its widest and enormous harm to the population and economics(Melik-Andreasyan G.G., 2004;WHO, VHPB, CDC, 2004; RantalaM., VandeLaarM.J.W., 2008).

The diseases of the gastro-intestinal tract and also the liver are often accompanied by changes of the oral cavity and parodont (Azatyan V.Yu.,2010).

The aim of the research is the study of clinical and morphological changes of the oral cavity in HBV and HCV infections.

Methods Used. 65 patients with HBV and HCV infections at the age 25-65 (25 women, 40 men) have been examined. The patients were on stationary treatment in "Nork" infection hospital in Yerevan, 2017. Clinical examination of the oral cavity has been carried out. For morphological examination the scrapes were painted into hemotocsilin-eosin, toluidin blue in the method of Shabadash for revealing of glicogen.With the aim of examination cytochemistry of oral cavity leucocites the method of painting cation proteins was used.

Results And Discussion. In the objective examinationof thethrashhold and oral cavity some change of the colourvere found out.The coating of the tongue was shown much rarer 17.3% HBV, 23.2% HCV, hemorrages on the oral cavity in 38.7% in HBV and 56.4% HCV infections. The state of parodont reminded of picture of gingivitis and parodontitis I, II degreis depending on the severity of the main desease. At the examination of the scrapes of oral cavity of the patients with HBV and HCV infections were shown both single accumulations of epiteliocytes, but also large centres of ripe plasts. Also distrophisirovenepiteliocytes and accumulation of neutrophiles and limphocytes. During the painting on glicogengrainness was shown. Histochemical examination of cavity oris showed depression of cation proteins in leucocytes which showed pale painting of specific granules in the cytoplasm of the cells. The resultsof the examination showed the fact of decrease of general resistent and the depression of nonspecific immune reactions of the organism. In some cases we had plasts consisting of basal and spur-like cells. In the spur-like stratum of the oral cavity we had many cells of plastic form with pale colored bubble-like nucle. In the spur-like stratum glycogen disappeared.

The results of morphological examination of the oral cavity scrapes in HB-Vand HCV infections witness the depression of carbohydratand proteins exchange. The depression of activity of cation proteins in leucocytes lead to depression of regenerative processes which witness the decrease of immunological resistence of the body, the violation of local reaction of the oral cavity and systemic reactivity of the body.

Keywords:

HBV infection HCV infection, oral cavity, scrapes

CONFERENCE ABSTRACTS
NOVEMBER 27th – DECEMBER 1st

CLINICAL ANALYSIS OF KLIMASHIN METHOD FOR COMPLETE REMOVABLE DENTURE FIXATION INCREASE ON THE LOWER JAW

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INTRODUCTION. Generally during practical work prosthodontists meet a number of difficulties concerning the fixation of the lower jaw complete removable dentition. Unfortunately, in such patients there are no favorable anatomical conditions, such as alveolar crest with clear round forms, presence of expressed transitive folds and dense mucosa.

Klimashin Yu.I. suggested a new system of fixation of the lower complete removable dentition in hard clinical cases. The author named it "belt-stabilizer", considering the need to maximize the expansion of the artificial denture field area not only horizontally, but also vertically settled buccal surface and the lower lip. For this purpose a strip is formed on the vestibular surface of the base, which has width of 5-6mm. It contacts with the mucosa of cheeks and lower lip across the whole length of vestibulum, which gives at least 6.5-7cm^2 additional surface for the denture base.

The surgical deepening of the vestibulum for enlargement of prosthesis area is not always preferable because of some reasons: age and refuse of the patient, accompanying diseases, side effects of surgery, economical problems, etc. For the same reasons it is not always possible to carry out implantation.

METHODS USED. Preparation of belt-stabilizer of different width and of complete removable dentures.

RESULTS AND DISCUSSION We examined 30 patients of gross body type and 36 patients of smaller body type. The clinical analysis allows to assume, that it is necessary to carry out clinical experiments with different variations of belt-stabilizer. For those patients, who considered to have not satisfactory effect, we made dentures with 7mm width strips. Our clinical studies showed that in 17 patients from 22 fixation increase was significant. This leaded to easier adaptation of the patients to the complete removable dentures of the lower jaw. For 23 patients from 36 with smaller body type we made belt-stabilizer with 4mm width. In 19 patients from 23 this experiment leaded to decrease of adaptation period without decubitus. At the same time fixation decrease was not noticed.

CONCLUSION. Generally it is difficult to fix complete removable denture of the lower jaw because of absence of favorable anatomical conditions, such as alveolar crest with clear round forms, presence of expressed transitive folds and dense mucosa.

Klimashin Yu.I. suggested a new system of fixation of the lower complete removable dentition in hard clinical cases. The author named it "belt-stabilizer". This method enlarges the artificial denture field area not only horizontally, but also vertically.

According to our clinical study, we consider Klimashin method extremely useful and necessary for increase of fixation of complete removable dentitions of the lower jaw. Considering proper clinical analysis we can note, that variations of belt-stabilizer width according to anthropometric properties of the patients are possible.

KEYWORDS:

*lower jaw,
complete removable denture,
belt-stabilizer*

THE EFFECTIVE THERAPY OF PERI-IMPLANTITIS WITH A REGENERATIVE APPROACH

2017 Science week

Conference Abstracts

November 27th – December 1st

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Introduction. Despite the high success rates of osseointegrated implants, increasingly frequent biological complications related to implants often result in implant loss. Peri-implantitis is a biological complication that occurs in dental implant patients and comprises a range of destructive inflammatory processes affecting surrounding soft and hard tissues.There are many approaches suggested by various authors for the treatment of peri-implant diseases, but there is no "ideal peri-implant therapy" that has been described in the literature . The development of new and effective methods of treatment and prevention of this disease is necessary.

The aim of this study was to investigate treatment outcome after surgical regenerative therapy of peri-implantitis.

Methods Used. 19 patients, with a total amount of 21 implants, who were diagnosed with peri-implantitis (6 implants diagnosed with early peri-implantitis, 11 implants-moderate peri-implantitis, and 4 implants severe peri-implantitis) were surgically treated with a regenerative surgical method.

The diagnostic parameters used for assessing peri-implantitis include clinical indices, probing pocket depth (PPD), bleeding on probing (BOP), suppuration, mobility, peri-implant radiography. Clinical and radiographical parameters were recorded before treatment (baseline) and at 3, 6 and 12 months after treatment.

Treatment include: Systemic antibiotics, debridement and removal of granulation tissue combined with magneto-laser therapy and osteoplasty using a autologous bone, Bio-Oss, hyaluronic acid Gengigel and a membrane Bio-Gide. 4 implants with remaining pathology and progressive bone loss, causing symptoms and discomfort to the patients were removed.

Results And Discussion. Clinical and radiological indices were improved. The mean at baseline were probing PPD-5,4±0,24 mm, BOP-2,5±0,31. 1 months after the treatment the mean PPD-3,7±0,17, BOP were 0,6±0,14 respectively. On the x-ray image, a shadow of the newly formed tissue was seen in the focus of augmentation. Subsequent study was carried out after 6 months. Clinical evaluation of the results of treatment after 3 months showed reduction in both PPD-3,2±0,17 and BOP-0,4±0,12 were as compared with the baseline clinical measurements. After 6 months x-ray examination demonstrated newly formed hard tissue was observed filling the defects around the implants. Stable clinical measurements PPD and BOP were demonstrated after 1 year the initial treatment, remaining stable during the following 3 years.

Conclusions. Our results suggest that magneto-laser therapy and hyaluronic acid Gengigel represents a reliable adjunctive treatment to conventional therapy. This combination of surgical and therapeutic treatment aims at improvement of the quality of regenerated bone structures. Surgical regenerative procedures combined with mechanical and chemical detoxification of the implants' surface, magneto-laser therapy and bone grafting with grafts materials and hyaluronic acid Gengigel, was an effective therapy for stopping and treatment peri-implantitis.

Prevention of peri-implant disease starts with a sufficient planning including individual evaluation and minimization of risk factors.

Keywords:

peri-implantitis, regenerative therapy, magneto-laser therapy, hyaluronic acid

2017 Science week
Yerevan State Medical University after M. Heratsi

CONFERENCE ABSTRACTS
NOVEMBER 27th – DECEMBER 1st

NEW METHOD OF INTERMAXILLARY FIXATION FOR MANDIBLE FRACTURES

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INTRODUCTION. Nowadays, with the conception of open reduction internal fixation (ORIF), the crucial goal of modern maxillofacial surgery is to achieve the highest possible quality of life by returning the patient to the best possible condition [1]. This situation includes the shortest postoperative inter maxillary fixation (IMF) possible. The most popular method of IMF in last decades was fixation with Erich Arch Bars (EAB). However, recent studies have reported some disadvantages of EAB application such as the long operating time, needle-stick injuries, the high plaque index, periodontal damage, movement of the teeth in lateral and extrusive direction [2]. Recently self-tapping IMF screws have been advocated for intermaxillary fixation. Despite the fact that the method is easy to apply it carries the risk of damage to the roots of the teeth [3]. The aim of this study is presenting of new alternative method of IMF for mandible fractures treatment efficacy.

METHODS USED. Objectives of the Study is to compare the efficacy and advantages of proposed vacuum formed splints v/s Erich Arch Bar for IMF in the treatment of mandibular fractures.

For the period of 2015-2017years 75 patients were treated for mandible fractures in Department of ENT and Maxillofacial Surgery of "Heratsi"№1 Hospital. From 75 patients 73 were men and 2 women at the age ranges of 17-68 years. The Main Group includes 55 patients treated with new method of IMF followed by open reduction and internal fixation under general anesthesia, which we call Aleksanyan`s splint by author. C or A silicone material was used intraoperatevly for impression taking. EVA material were used in technical laboratory for vacuum formed splints preparation and 4-6 orthodontic buttons were fixed in each splint for intermaxillary rubber fixation. 20 patients were in Control Group and treated by standard EAB method of IMF. For methods compare were used parameters-such time taken for IMF, incidence of needlestick injury, tooth morbidity, fixation stability, patient acceptance and periodontal health and hygiene. Oral hygiene index given by Shiller and Pisarev was used to evaluate the oral hygiene status at the time of 1st and 6th weeks after the IMF and were scored accordingly.

RESULTS AND DISCUSSION. With regards to the EAB methods of IMF, Aleksanyan splint exhibited a shorter operating time (10 min vs. 50 min), needlestick injuries were exclude as well as periodontal and mucosal damage and teeth movement. Although, both the techniques offers good postoperative intermaxillary fixation, maintenance of oral hygiene and patient acceptance was good with IMF with Aleksanyan splints compared to arch bars.

CONCLUSIONS. Considering the results, we conclude that an Aleksanyan splint provides a more effective alternative to traditional arch bar technique for the treatment of mandibular fractures.

KEYWORDS:

Mandible fractures, Intermaxillary fixation, Arch bars, EVA splints

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NEW METHOD OF TRACHEOSTOMY IN ICU PATIENTS IN "HERATSY" №1 HOSPITAL

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Conference Abstracts

November 27th – December 1st

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Introduction. Long-term mechanical ventilation is the most common situation for which tracheostomy is indicated for patients in intensive care units (ICU) [1]. The best technique for performing tracheostomy remains a matter of debate [2]. The determining factors in deciding whether to use a surgical tracheostomy or percutaneous dilatated tracheostomy (PDT) in a particular situation depends on patient anatomical and physiological factors and, as well on surgeon experiences and prefers. The aim of study is to present the modified method of surgical tracheostomy with compare of the classical surgical tracheostomy (CST) and percutaneous dilatation tracheostomy (PDT) techniques to reduce surgical trauma and complications.

Methods Used. From May 2013 to July 2017 in ICU of "Heratsi" № 1 Hospital were performed 61 tracheostomies using Modified Surgical Tracheostomy Technique by Poghosyan (PMST) and these patients formed the Main Group. The Control Group was created collecting clinical data from medical records of 53 patients who underwent the CST (Control Group A), and 28 patient who underwent the PDT from September 2006 to April 2012 (Control Group B).

From 61 patients on prolonged mechanical ventilation in ICU 30 (49.1%) have anatomical disadvantages for PDT (short and fatty neck or morbidly obese patients with body mass index greater than 40 kg/m2) and 34 (55.7%) patients undertook anticoagulants. Both the open surgical (OS) and the PDT require similar anesthesia, analgesia, positioning and sterile preparation For results interpretation we have analyzed average duration of operation, early and intermediate complication and esthetic results of each method of tracheostomy.

Results And Discussion. Main Group (PMST) had less early complications (1 death because of apnoea, 1, 6% $\chi 2=19.83$) compare to Group A (CST) (18 early complications including 2 deaths, 33.9% p=0,025) and Group B (PDT) (5 complications without death, 17,8% p=0,220).

There was no tracheostomy related mortality in intermediate stage of postoperation care. Also there was less intermediate complications rate in PMST Group compare to CST Group (0 vs. 11) and PDT Group (0 vs. 5). Average duration of operation in PMST Group was 11+/-2 min, in compare with CST (30+/-3 min) and PDT Group (14+/-2 min). The aesthetic results of the PMST were similar to those of percutaneous TT, and coarse postoperation scarring was observed in CST Group.

Overall, evidence confirms that PDT is preferential in appropriately selected ICU patients.. But it`s also suggests, that an estimated 7% of elective PDTs require conversion to OS [3]. Furthermore, given the prevalence of coagulopathies and morbid obesity, it is inappropriate to discard the OS technique.

Conclusions. In our experience the PMST demonstrated to be easily, safe and reproducible with fewer amounts of early and intermediate complications in compare with CST and PDT methods.

Keywords:

Surgical tracheostomy, percutaneous tracheostomy, ICU

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2017 Science week
CONFERENCE ABSTRACTS
NOVEMBER 27th – DECEMBER 1st

MULTIDISCIPLINARY APPROACH FOR TREATMENT OF CLEFT LIP AND PALATE

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KEYWORDS:

Cleft lip and palate, craniofacial anomalies, Multidisciplinary treatment approach

INTRODUCTION. Cleft lip and palate (CLP) are among the most common of all congenital deformities, and the incidence appears to be slowly rising. The majority of clefts of the lip and palate are believed to have a multifactorial aetiology with several genetic and environmental factors interacting to shift the complex process of morphogenesis Children born with cleft lip and palate may have severe difficulties in feeding, speaking, and hearing and have to cope with severe psychological problems at school and in their social lives.

The management of this developmental malformation is multidisciplinary and involves surgical, dental, and orthodontic treatment; speech training; audiological treatment. The primary goals of surgical repair are to restore normal function, integrity of the primary and secondary palate, normal speech and hearing, airway patency, and facial esthetics. Various surgical techniques are followed by different surgeons for the primary repair of the cleft lip and palate[1-12].

The currently accepted model for delivery of this care in the most appropriate way is the multidisciplinary cleft team. At present, the necessity of uniting the efforts of the surgeon and orthodontist in planning the treatment of the child has become quite obvious. In severe forms of cleft palate early intervention of the orthodontist allows you to control and stimulate the postnatal development of the upper jaw, providing harmony in the size and relationship of the dental arches in the early stages of growth of the jaws.

The purpose of this report was to show that an interdisciplinary treatment protocol, after adequate diagnosis and planning, significantly improves the alterations resulting from CLP deformity.

METHODS AND USED. In total, 16 clefts lip and palate repaired within the first 3-6months of life, receiving comprehensive treatment during the period between 2013 to 2017.

Preoperative preparation***:*** All cases were consulted by a neonatologist for fitness for surgery, absence of other congenital anomalies or diseases and anesthesiologist for assessment of tolerating general anesthesia and routine preoperative investigations (Blood hemoglobin, Blood sugar, PT, PTT, and Serum Bilirubin) were done. Anesthesia was general inhalational through an end tracheal tube. Early orthodontic treatment consisted in removing the impression of the upper jaw before the start of surgery after intubation anesthesia. Based on the resulting impression in the orthodontic clinic, a plate device with a screw. This device was installed on the upper jaw in the postoperative period after 15-20 days, to restore individual deformed segments that arise due to congenital defects. The device was activated every third day, if the device is installed for more than 16 hours, and every fifth day, if it worked from 6 to 12 hours.

RESULTS AND DISCUSSION. In all cases no intraoperative or postoperative complications. All cases showed a postoperative satisfactory functional and aesthetic results. The ultimate goal of the device was the reduction or complete leveling of the distance between the alveolar processes, which later allowed instead of a two-stage one-stage uranoplasty. The alveolar moulding can also help to reduce the number of future alveolar bone grafting surgeries.

CONCLUSIONS. Thus, the developed complex approach in the treatment of cleft lip and palate allow us to recommend this technique in a wide clinical practice.

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PERSPECTIVES FOR STUDYING THE STATUS OF A DENTIST OF GENERAL PRACTICE

2017 Science week

Conference Abstracts

November 27th – December 1st

Tatintsyan V.G.,
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Course on general dental activity of postgraduate education

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Introduction. The implementation of preventive measures, the realization at an early stage of the dental diseases treatment allow the dentist of general practice to overwhelmingly prevent the occurrence of complicated forms of diseases. The highest effectiveness of preventive measures complex is in families who receive constant assistance under the program of a family dentist and a psychologist (Yurieva L. I and coauthors, 2007).

The study of the social status of a dentist of general practice with the aim of optimization of his activity gives him a possibility to increase the prestige of his profession on the basis of patients', dentists' opinions study; it helps to provide the professional perspectives of the dentist of general practice. The present approach currently is inserted in the healthcare systems of all the countries of Europe (Starfield B.,1998). Probably for this reason in the majority of the countries therapeutic and preventive dental care is provided by specialists of general practice for 80-85% of cases.

In this regard, intensive preparatory work with various population contingents on a wide scale of general medical practice is necessary (Ryakova EO, 2006). This will allow to increase the social status of a dentist of general practice, will contribute to the optimization of his professional activity, will define the criteria for rational use of this profession.

Methods Used. economic factors for dental care are partially revealed. The received data allow to developthe parameters of personal responsibility based on marketing in the dynamics of observations in order to prevent possible complications of main dental diseases.

Conclusion. Based on the oral inquiry carried out in the Republic of Armenia a strong deficit of specialists in the field of marketing and management in stomatology is revealed.

We have found out that the main motivational prerequisites for contacting private clinics are the high quality of treatment and the good level of service.

However, the lack of accountability of dental clinics makes it difficult to conduct dental analysis not only in terms of the number of visits, but also in the analysis of the main dental diseases.

The study on the quality of life of patients of dental profileaccording to the survey data: data of the mental, physical, emotional, social state are completely absent, which dictates the definition of the study of the quality of life criteria for determination of the need for dental care. The lack of this program and its implementation in our Republic will contribute to economic efficiency and the social prestige of the profession, which was the subject of our research.

Keywords:

Prophylaxis of stemmatological diseases, marketing, status of the dentist of general practice

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