# The journal "Stomatologiya dlya vsekh / International Dental Review" no. 3 (80) 2017 Abstracts of the articles

## P. 6 Technological and subjective factors of the quality of dental care

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## **Summary**

The present article highlights the issues of the quality of dental care. The quality factors related to the technologies used for treatment, materials, tools, equipment, financial, administrative and infrastructural support for the treat- ment process, as well as subjective factors, are considered in detail.

Keywords: dental care, quality factors, technologies, subjective factors.

**Citation:** Leontyev V.K., Konarev A.V. Technological and subjective factors of the quality of dental care. Stomatology for All / Int. Dental Review. 2017; 3 (80); 6–8.

# P. 10 Assessment of functioning and vital activity limitations in providing dental care to patients with inflammatory periodontal diseases

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## Summary

The article presents the results of the analysis of medical cards of dental patients with inflammatory periodontal diseases. The presence and presentation of information on the assessment of chewing and biting, toothache, including such categories of vital activity as eating, speech, oral care contained in case histories of dental patients were analyzed. The results of the study revealed a frequent lack of information in the medical documentation on theassessment of the mentioned categories, and also indicated an objective change in the functioning and life activity of patients with inflammatory periodontal diseases before and after treatment.

Keywords: assessment of functioning, ICF, assessment of treatment efficacy.

**Citation:** Nacopiya L.B. Assessment of functioning and vital activity limitations in providing dental care to patients with inflammatory periodontal diseases. Stomatology for All / Int. Dental Review. 2017; 3 (80): 10—11.

# P. 12 Advantages of CAD-CAM digital technologies (on the example of manufacturing single ceramic restorations with the use of clinical cad-cam system planmeca fit)

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## Summary

The article describes the clinical experience of the CAD- CAM system Planmeca FIT used for ceramic restoration of the molar. The features of the stages are detailed and the relevant illustrations are given. The advantages of this method of prosthetics are shown.

Keywords: CAD-CAM, indirect restorations, digital dentistry.

**Citation:** Kostin K.A. Advantages of CAD-CAM digital technologies (on the example of manufacturing single ceramic restorations with the use of Clinical CAD-CAM System Planmeca FIT). Stomatology for All / Int. Dental Review, 2017; 3 (80); 12—14.

# P. 16 Clinical And Immunological Assessment Of The Oral Cavity In Patients With Orthopedic Appliances Made Of Various Basic Materials

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## Summary

The article presents the results of comprehensive exam- ination of patients with removable dentures made of vari- ous construction materials. The methods used were survey, questioning, clinical examination, immunological exami- nation of oral fluid, and x-ray examination.

Subjective and objective indices of the oral cavity were studied in patients with removable dentures made of vari- ous basic materials.

The most common indices revealed were — discol- oration of the oral mucosa — 53.3%, stomatodynia — 38.3% and dry mouth — 33.3%.

Data on humoral factors of oral protection — IgA, sIgA, IgE and interleukins IL-4, IL-6 were studied in patients with orthopedic appliances made of basic materials — acrylics and thermoplastics.

The obtained results give grounds for improvement of the examination algorithm in such patients.

**Keywords:** dental defects, removable prosthetic appli- ances, acrylic plastic, thermoplastics, immunoglobulins, interleukins

**Citation:** Bulgakova A.I., Mirsaeva F.Z., Aznabaeva L.F., Galeev R.M. Clinical and immunological assessment of the oral cavity in patients with orthopedic appliances made of various basic materials. Stomatology for All / Int. Dental Review. 2017; 3 (80); 16—19.

# P. 20 The functional status of regional blood circulation and periodontal microcirculation in foreign students suffering from neurocirculatopy dystonia

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#### Summary

The article presents the results of the clinical and func- tional research of the periodontal tissue in foreign students (RUDN University) suffering from neurocirculatory dysto- nia. The study of regional hemodynamics and microcirculation in periodontal tissues was performed by using reop- arodontography and laser Doppler flowmetry.

The obtained results revealed the development of the spastic form of circulation in periodontal tissues character- ized by persistent vasoconstriction and manifestations of initial arteriolosclerosis.

**Keywords:** neurocirculatory dystonia, rheovasography, reoparodontography, laser Doppler flowmetry, vasoactive test, intact periodontium, gingivitis, wavelet analysis.

**Citation:** Pilshchikova O.V., Ermolyev S.N., Daurova F.Yu.The functional status of regional blood circulation and periodontal microcirculation in foreign students suffering from neurocirculatory dystonia. Stomatology for All / Int. Dental Review. 2017; 3 (80); 20–26.

# P. 28 Hygienic assessment of the implant-gingival joint in patients with implantsupported orthopedic appliances

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#### Summary

The article presents the results of a survey of 80 patients with orthopedic structures, fixed on dental implants. Was used different combinations of resources to care for mouth lines R.O.C.S. Based on these data it is concluded that the application of the hygiene of the mouth line R.O.C.S. in various combinations can reduce the accumulation of plaque and prevents the development of inflammation in the area implantate-gingival and prosthetic joints and may be recommended for daily personal hygiene care to patients with fixed and removable prosthetic construction based on dental implants.

Keywords: periimplantitis, clinical indices, oral care products.

**Citation:** Dmitriev A.Yu., Gvetadze R.Sh., Dmitrieva N.A. Hygienic assessment of the implant-gingival joint in patients with implant-supported orthopedic appliances. Stomatology for All / Int. Dental Review. 2017; 3 (80); 28–32.

## P. 34 Bacteriophage therapy in parodontology: clinical and laboratory study

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### Summary

The effective treatment of periodontal inflammation is usually based on medicamentous impact on parodonta pathogenic bacteria which is the main causative agent of gingivitis and periodontitis. In this article, the effectiveness of the bacteriophage-based gel "Phagodent" s was studied in patients with chronic catarrhal gingivitis and chronic mild periodontitis. 110 patients were involved in the stugy (12 months of observation). Microbial flora of the gingival groove and periodontal pockets was studied with PCR and mass-spectrometry. The results showed that the Phagodent gel has a pronounced positive effect in the initial forms of periodontal inflammatory diseases due to a decrease in the number of periodontal pathogens and an increase in the representatives of normal flora.

**Keywords**: gingivitis, periodontitis, periodontal inflam- matory diseases, parodontopathogens, bacteriophages, phages, PCR diagnostics, mass-spectrometry.

**Citation:** Grudyanov A.I., Frolova O.A., Isadzhanyan K.E., Popova V.M. Bacteriophage therapy in parodontol- ogy: clinical and laboratory study. Stomatology for All / Int. Dental Review. 2017; 3 (80); 34—40.

## P. 40 Pathogenesis of periodontitis: molecular mechanisms

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## **Summary**

A study of innate immunity in periodontitis of various intensity was conducted. Analysis of the expression of TLR4 and HBD-3 genes in epithelial cells of periodontal mucosa and TGFR $\Box$ -1 and IL-6 cytokines confirmed the role of innate immunity factors in the pathogenesis of periodontitis. In mild periodontitis, an increase in the expression of HBD-3 genes in epithelial cells of periodontal mucosa and IL-6 cytokine was revealed. This is characteristic of the reaction of innate immunity to microbial aggression. In mild and severe forms of periodontitis, a sharp increase in the expression of TLR4 genes in the epithelial cells of the periodontal mucosa and TGF $\Box$ -1 cytokine in the gingival fluid was found. This is a typical active immune reaction to the destruction of periodontal tissues. Blocking the activity of innate immunity factors can be used as a promising preventive and curative measure.

**Keywords:** pathogenesis of periodontitis, innate immunity, expression of TLR4 and HBD-3 genes, epithelial cells, cytokines TGF $\Box$ -1 and IL-6 gingival fluid.

**Citation:** Zorina O.A., Gankovskaya L.V., Balykin R.A., Svitich O.A., Ivanyushko T.P. Pathogenesis of periodontitis: molecular mechanisms. Stomatology for All / Int. Dental Review. 2017; 3 (80); 41–45.

# P. 46 Application of a new medication for sedation in dentistry and maxillofacial surgery

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## **Summary**

The article highlights the characteristics and clinical application of the new drug dexmedetomidine, the selec- tive agonist of alpha-2-adrenergic receptors, for sedation in dentistry and maxillofacial surgery. Its positive aspects for outpatient practice are described. The clinical effects of dexmedetomidine proved to be very favorable in orthog- nathic surgery and for inpatients with free flaps transplant- ed for reconstruction of the middle and lower zones of the face.

**Keywords:** dexmedetomidine, sedation, dentistry, max- illofacial surgery, free flaps, somatic oximetry.

**Citation:** Rabinovich S.A., Dobrodeev A.S. Application of a new medication for sedation in dentistry and maxillofacial surgery. Stomatology for All / Int. Dental Review. 2017; 3 (80); 46—50.

# P. 52 Electrochemical in vitro compatibility of denture samples made of russian noble metal and titanium-based dental alloys

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## Summary

A study of electrochemical compatibility of 10 russian noble dental alloys, 2 noble galvanic coatings, and 2 titanium-based alloys in artificial saliva solution (pH=5.8) has been conducted. Potentials difference has been measured for 85 selected alloys. The value of the potentials difference of 50 mV has been taken as the reference range. Only 4 of 85 examined pairs of alloys showed the value of potentials difference higher than 50 mV. Those are: Palladent-AuAgCu 900; Plagodent Plus-Palladent UNI; Plagodent Plus-PD 250 SM; Pemadent-PD 250 SM.

**Keywords**: noble metal dental alloys, electrochemical compatibility, biocompatibility, corrosion stability.

**Citation:** Parunov V.A, Lebedenko I.Yu., Fishgoit L.A. Electrochemical in vitro compatibility of denture samples made of russian noble metal and titanium-based dental alloys. Stomatology for All / Int. Dental Review. 2017; 3 (80): 52–56.

# P. 58 Comparative evaluation of antibacterial, antiplaque action of various mouth rinses and their effect on the pH of the oral fluid

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#### **Summary**

This study investigated the antibacterial and antifungal effects of 5 mouthrinses with various antiseptic compo- nents, their effect on the pH of the oral fluid and on the status of the oral hygiene. The results of this study show that despite the low pH values of mouthwashes the saliva buffer systems can quickly neutralize them. The evaluation of the oral hygiene indices of 50 study participants record- ed after the second week indicates the direct correlation between the antimicrobial and antiplaque properties of mouthwashes. Mouthrinses containing chlorhexidine and triclosan have the most pronounced antimicrobial activity.

**Keywords**: mouthrinse, level of oral hygiene, pH of the oral fluid, antibacterial property.

**Citation:** Babina K.S., Usatova G.N., Khazhakyan M.R., Surmilo I.M. Comparative evaluation of antibacterial, antiplaque action of various mouth rinses and their effect on the pH of the oral fluid. Stomatology for All / Int. Dental Review. 2017; 3 (80): 58—61.