

# Restorative Dentistry

Evidence Update

October 2017 (Bimonthly)



Respecting everyone  
Embracing change  
Recognising success  
Working together  
**Our hospitals.**



# Training Sessions 2017

*All sessions are one hour*

## August (12.00-13.00)

4th (Fri)	Critical Appraisal
9th (Wed)	Literature Searching
15th (Tues)	Interpreting Statistics
24th (Thurs)	Critical Appraisal

## September (13.00-14.00)

Fri 1st	Literature Searching
Mon 4th	Critical Appraisal
Tue 12th	Interpreting Statistics
Wed 20th	Literature Searching
Thu 28th	Critical Appraisal





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# The Latest Evidence for Restorative Dentistry

**NICE** National Institute for  
Health and Care Excellence

**[Dental procedures, antibiotic prophylaxis, and endocarditis among people with prosthetic heart valves: nationwide population based cohort and a case crossover study](#)**

07 September 2017 - Publisher: British Medical Journal

**[A systematic review and meta-analysis of three-unit fixed dental prostheses: are the results of two abutment implants comparable to the results of two abutment teeth?](#)**

Source: [PubMed](#) - 23 September 2017 - Publisher: Journal Of Oral Rehabilitation [Read Summary](#)

**[Effects of Bacterial Contamination on Dental Implants During Surgery: A Systematic Review](#)**

Source: [PubMed](#) - 01 October 2017 - Publisher: Implant Dentistry [Read Summary](#)

**[Prognosis of Combining Remaining Teeth and Implants in Double-Crown-Retained Removable Dental Prostheses: A Systematic Review and Meta-Analysis](#)**

Source: [PubMed](#) - 22 September 2017 - Publisher: The International Journal Of Oral & Maxillofacial Implants [Read Summary](#)

**[The complete digital workflow in fixed prosthodontics: a systematic review](#)**

Source: [PubMed](#) - 19 September 2017 - Publisher: Bmc Oral Health

**[The cost-effectiveness of oral health interventions: A systematic review of cost-utility analyses](#)**

Source: [PubMed](#) - 19 September 2017 - Publisher: Community Dentistry And Oral Epidemiology



**[Interventions for managing medication-related osteonecrosis of the jaw](#)**

Natalie H Beth-Tasdogan, Benjamin Mayer, Heba Hussein, Oliver Zolk

Online Publication Date: October 2017

**[Resorbable versus titanium plates for orthognathic surgery](#)**

Anirudha Agnihotry, Zbys Fedorowicz, Mona Nasser, Karanjot S Gill

Online Publication Date: October 2017

**[Orthodontic treatment for deep bite and retroclined upper front teeth in children](#)**

Declan T Millett, Susan J Cunningham, Kevin D O'Brien, Philip E Benson, Cesar M de Oliveira

Online Publication Date: October 2017

UpToDate®

OpenAthens login required. Register here: <https://openathens.nice.org.uk/>

**[Gingivitis and periodontitis in adults: Classification and dental treatment](#)**

- [Summary](#)

Literature review current through: Sep 2017. | This topic last updated: Apr 17, 2017.

**[Risks of bisphosphonate therapy in patients with osteoporosis](#)**

- [Summary and recommendations](#)

Literature review current through: Sep 2017. | This topic last updated: Mar 01, 2017.

**[Medication-related osteonecrosis of the jaw in patients with cancer](#)**

- [Summary and recommendations](#)

Literature review current through: Sep 2017. | This topic last updated: Feb 03, 2017.

**[Etiology, prenatal diagnosis, obstetrical management, and recurrence of orofacial clefts](#)**

- [Summary and recommendations](#)

Literature review current through: Sep 2017. | This topic last updated: Feb 22, 2017.

**[Oral and systemic health](#)**

- [Summary](#)

Literature review current through: Sep 2017. | This topic last updated: Jun 29, 2017.



**The Dental Elf**

**[Orthodontic treatment for Class II division 2 malocclusion: No randomised trial evidence](#)**

Oct 16 2017

**[Fissure sealants: performance not affected by tooth characteristics](#)**

Oct 12 2017

**[Cleft lip and palate patients have higher caries experience](#)**

Oct 10 2017



# KnowledgeShare

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These are individualised, based on a staff member's interest in particular conditions or lifestyle factors, age groups, settings of care, interventions and management topics.

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# Recent Database Articles on Restorative Dentistry

Below is a selection of articles on restorative dentistry recently added to the healthcare databases, grouped in the following categories:

- Peri-implantitis
- Bisphosphonate-related osteonecrosis of the jaw
- Dental-related cleft lip and palate
- Periodontal disease and antibiotics
- Dental-related head and neck oncology
- Dental implants

If you would like any of the following articles in full text, or if you would like a more focused search on your own topic, then get in touch: [library@uhbristol.nhs.uk](mailto:library@uhbristol.nhs.uk)

## Peri-implantitis

### Association of Cytokine Gene Polymorphism with Peri-implantitis Risk.

**Author(s):** Petkovic-Curcin, Aleksandra; Zeljic, Katarina; Cikota-Aleksic, Bojana; Dakovic, Dragana; Tatic, Zoran; Magic, Zvonko

**Source:** The International journal of oral & maxillofacial implants; ; vol. 32 (no. 5); p. e241

**Publication Type(s):** Journal Article

**Abstract:** PURPOSE To investigate whether polymorphisms of cluster of differentiation 14 (CD14), tumor necrosis factor alpha (TNF $\alpha$ ), interleukin (IL)6, IL10, and IL1ra genes are associated with the risk of peri-implantitis susceptibility in patients with dental implants in the Serbian population.

[ABSTRACT EDITED]

### Retrospective Analysis on Survival Rate, Template-Related Complications, and Prevalence of Peri-implantitis of 694 Anodized Implants Placed Using Computer-Guided Surgery: Results Between 1 and 10 Years of Follow-Up.

**Author(s):** Tallarico, Marco; Meloni, Silvio Mario

**Source:** The International journal of oral & maxillofacial implants; ; vol. 32 (no. 5); p. 1162-1171

**Publication Type(s):** Journal Article

**Abstract:** PURPOSE To report survival rate, early surgical template-related complications, and prevalence of peri-implantitis of dental implants placed in private practices using computer-guided, template-assisted surgery and followed between 1 and 10 years. [ABSTRACT EDITED]

### Association Between Clinical and Microbiologic Cluster Profiles and Peri-implantitis.

**Author(s):** Canullo, Luigi; Peñarrocha, Miguel; Monje, Alberto; Catena, Andres; Wang, Hom-Lay;

**Source:** The International journal of oral & maxillofacial implants; ; vol. 32 (no. 5); p. 1054-1064

**Publication Type(s):** Journal Article

**Abstract:** PURPOSE The correlation between associated local factors and peri-implantitis remains unknown. The aim of this study was to investigate the association between the clinical and microbiologic profiles and peri-implantitis to eventually categorize different groups of this disease. [ABSTRACT EDITED]

**Prognosis of Dental Implants Immediately Placed in Sockets Affected by Peri-implantitis: A Retrospective Pilot Study.**

**Author(s):** Anitua, Eduardo; Piñas, Laura; Begoña, Leire; Alkhraisat, Mohammad Hamdan

**Source:** The International journal of periodontics & restorative dentistry; ; vol. 37 (no. 5); p. 713-719

**Publication Type(s):** Journal Article

**Abstract:** The aim of this study was to describe a protocol and analyze the outcomes of immediate replacement of failed implants due to peri-implantitis. A total of 17 patients (mean age:  $58 \pm 10$  years) had 22 failed implants that were immediately replaced. One implant failed 16 months after insertion, resulting in an implant survival rate of 94.7%. The mean follow-up time was  $40 \pm 16$  months (range: 9-52 months) after insertion. Mesial and distal bone loss were  $0.89 \pm 0.62$  mm and  $0.97 \pm 0.66$  mm, respectively. Immediate implant replacement could be considered in the management of implant failure due to peri-implantitis.

**Human Histologic Evidence of Reosseointegration Around an Implant Affected with Peri-implantitis Following Decontamination with Sterile Saline and Antiseptics: A Case History Report.**

**Author(s):** Fletcher, Paul; Deluiz, Daniel; Tinoco, Eduardo Mb; Ricci, John L; Tarnow, Dennis P;

**Source:** The International journal of periodontics & restorative dentistry; ; vol. 37 (no. 4); p. 499

**Publication Type(s):** Journal Article

**Abstract:** The treatment of peri-implant disease is one of the most controversial topics in implant dentistry. The multifactorial etiology and the myriad proposed techniques for managing the problem make successful decontamination of an implant surface affected by peri-implantitis one of the more unpredictable challenges dental practitioners have to face. This article presents the first known published case report demonstrating human histologic evidence of reosseointegration using a plastic curette for mechanical debridement and dilute sodium hypochlorite, hydrogen peroxide, and sterile saline for chemical detoxification. Guided bone regeneration in the infrabony component of the peri-implantitis lesion was accomplished using calcium sulfate and bovine bone as grafting materials and a porcine collagen barrier for connective tissue and epithelial exclusion.

**Correlation of Three-Dimensional Radiologic Data with Subsequent Treatment Approach in Patients with Peri-implantitis: A Retrospective Analysis.**

**Author(s):** Bender, Philip; Salvi, Giovanni E; Buser, Daniel; Sculean, Anton; Bornstein, Michael M

**Source:** The International journal of periodontics & restorative dentistry; ; vol. 37 (no. 4); p. 481-489

**Publication Type(s):** Journal Article



**Abstract:**The purpose of this retrospective radiographic study was to evaluate and correlate the dimensions and morphology of peri-implant bone defects as determined via cone beam computed tomography (CBCT) scans with regard to the selected treatment approach. **[ABSTRACT EDITED]**

**A novel non-surgical method for mild peri-implantitis- a multicenter consecutive case series.**

**Author(s):** Wohlfahrt, J C; Evensen, B J; Zeza, B; Jansson, H; Pilloni, A; Roos-Jansåker, A M

**Source:** International journal of implant dentistry; Dec 2017; vol. 3 (no. 1); p. 38

**Publication Type(s):** Journal Article

Available at [International journal of implant dentistry](#) - from Europe PubMed Central - Open Access

**Abstract:AIM**The aim of the present study was to evaluate the effect on peri-implant mucosal inflammation from the use of a novel instrument made of chitosan in the non-surgical treatment of mild peri-implantitis across several clinical centers. **[ABSTRACT EDITED]**

**MicroRNA sequence analysis identifies microRNAs associated with peri-implantitis in dogs.**

**Author(s):** Wu, Xiaolin; Chen, Xipeng; Mi, Wenxiang; Wu, Tingting; Gu, Qinhuang; Huang, Hui

**Source:** Bioscience reports; Oct 2017; vol. 37 (no. 5)

**Publication Type(s):** Journal Article

Available at [Bioscience reports](#) - from EBSCO (MEDLINE Complete)

**Abstract:**Peri-implantitis, which is characterized by dense inflammatory infiltrates and increased osteoclast activity, can lead to alveolar bone destruction and implantation failure. miRNAs participate in the regulation of various inflammatory diseases, such as periodontitis and osteoporosis. Therefore, the present study aimed to investigate the differential expression of miRNAs in canine peri-implantitis and to explore the functions of their target genes. **[ABSTRACT EDITED]**

**Restoration contour is a risk indicator for peri-implantitis: A cross-sectional radiographic analysis.**

**Author(s):** Katafuchi, Michitsuna; Weinstein, Bradley F; Leroux, Brian G; Chen, Yen-Wei

**Source:** Journal of clinical periodontology; Oct 2017

**Publication Type(s):** Journal Article

**Abstract:AIM**The purpose of this study was to determine if restoration emergence angle was associated with peri-implantitis. **[ABSTRACT EDITED]**

**A new multiple anti-infective non surgical therapy in the treatment of peri-implantitis: a case series.**

**Author(s):** Mensi, Magda; Scotti, Eleonora; Calza, Stefano; Pilloni, Andrea; Grusovin, Maria G;

**Source:** Minerva stomatologica; Oct 2017

**Publication Type(s):** Journal Article

**Abstract:BACKGROUND**Peri-implantitis is a frequent disease that may lead to implant loss. The aim of this case series was to evaluate the clinical results of a new non-surgical treatment protocol. **[ABSTRACT EDITED]**

**Microbiome and Microbial Biofilm Profiles of Peri-Implantitis: A Systematic Review.****Author(s):** Lafaurie, Gloria Inés; Sabogal, María Alejandra; Castillo, Diana Marcela;**Source:** Journal of periodontology; Oct 2017; vol. 88 (no. 10); p. 1066-1089**Publication Type(s):** Journal Article**PubMedID:** 28625077**Abstract:**BACKGROUND This systematic review assesses microbiologic profiles of peri-implantitis, periodontitis, and healthy implants based on studies that evaluated microbial biofilms and entire microbiomes to establish their similarities and differences. **[ABSTRACT EDITED]****Etiology, Diagnosis and Treatment of Peri-Implantitis – a National Survey of AAOMS Members.****Author(s):** Thakkar, J.; Oh, J.; Inglehart, M.; Aronovich, S.**Source:** Journal of Oral & Maxillofacial Surgery (02782391); Oct 2017; vol. 75**Publication Type(s):** Academic Journal**Occurrence of cases with peri-implant mucositis or peri-implantitis in a 21-26 years follow-up study.****Author(s):** Renvert, Stefan; Lindahl, Christel; Persson, G Rutger**Source:** Journal of clinical periodontology; Sep 2017**Publication Type(s):** Journal Article**Abstract:**AIM to determine the prevalence and development of peri-implant mucositis and peri-implantitis and to assess risk factors over time. **[ABSTRACT EDITED]****Combination of Ultrasonic Decontamination, Soft Tissue Curettage and Submucosal Air Polishing With Povidone-Iodine Application for Non-Surgical Therapy of Peri-Implantitis: 12 Months Clinical Outcomes.****Author(s):** Stein, Jamal M; Hammächer, Christian; Said-Yekta Michael, Sareh**Source:** Journal of periodontology; Sep 2017 ; p. 1-13**Publication Type(s):** Journal Article**Abstract:**BACKGROUND The aim of this study was to evaluate the clinical outcomes of a concept for non-surgical peri-implantitis combining stepwise mechanical debridement measures with adjuvant Povidone-iodine application with and without systemic antibiotics. **[ABSTRACT EDITED]****Surgical treatment of peri-implantitis. 3-year results from a randomized controlled clinical trial.****Author(s):** Carcuac, Olivier; Derks, Jan; Abrahamsson, Ingemar; Wennström, Jan L; Petzold, Max;**Source:** Journal of clinical periodontology; Sep 2017**Publication Type(s):** Journal Article**Abstract:**OBJECTIVE This study reports on the 3-year follow-up of patients enrolled in a randomized controlled clinical trial on surgical treatment of advanced peri-implantitis. **[ABSTRACT EDITED]****Surgical treatment of peri-implantitis; prognostic indicators of short-term results.**

**Author(s):** Koldsland, Odd Carsten; Wohlfahrt, Johan Caspar; Aass, Anne Merete

**Source:** Journal of clinical periodontology; Sep 2017

**Publication Type(s):** Journal Article

**Abstract:**AIMTo evaluate the clinical and radiographic short-term (6 months) effect of surgical treatment of peri-implantitis, and to identify prognostic indicators affecting the outcome using a multilevel statistical model. **[ABSTRACT EDITED]**

**Differences between inflammatory and catabolic mediators of peri-implantitis and periodontitis lesions following initial mechanical therapy: An exploratory study.**

**Author(s):** Ghighi, M; Llorens, A; Baroukh, B; Chaussain, C; Bouchard, P; Gosset, M

**Source:** Journal of periodontal research; Sep 2017

**Publication Type(s):** Journal Article

**Abstract:**BACKGROUND AND OBJECTIVEThe aim of this study was to analyze the differences in inflammatory and catabolic mediators expressed in peri-implantitis compared to periodontitis lesions after non-surgical therapy. Peri-implantitis is associated with a faster rate of bone loss when compared with periodontitis, and peri-implant non-surgical therapy is ineffective to cure peri-implantitis. This may be due to persistent inflammation in peri-implantitis tissues after initial mechanical treatment. **[ABSTRACT EDITED]**

**LOX-1 is involved in IL-1 $\beta$  production and extracellular matrix breakdown in dental peri-implantitis.**

**Author(s):** Che, Chengye; Liu, Jie; Ma, Lei; Xu, Huirong; Bai, Na; Zhang, Qian

**Source:** International immunopharmacology; Sep 2017; vol. 52 ; p. 127-135

**Publication Type(s):** Journal Article

**Abstract:**PURPOSETo explore whether lectin-type oxidized LDL receptor 1 (LOX-1), interleukin 1 beta (IL-1 $\beta$ ), matrix metalloproteinase 2 (MMP2) and matrix metalloproteinase 9 (MMP9) are involved in the nosogenesis of human dental peri-implantitis and determine the role of LOX-1 in IL-1 $\beta$ , MMP2 and MMP9 production in response to Porphyromonas gingivalis. **[ABSTRACT EDITED]**

**A retro-prospective effectiveness study on 3448 implant operations at one referral clinic: A multifactorial analysis. Part II: Clinical factors associated to peri-implantitis surgery and late implant failures.**

**Author(s):** Jemt, Torsten

**Source:** Clinical implant dentistry and related research; Sep 2017

**Publication Type(s):** Journal Article

**Abstract:**BACKGROUNDLittle knowledge is available on implant treatment in large effectiveness studies in routine practice.PURPOSETo report retro-prospective data on prevalence of peri-implantitis surgery and late implant failures in a large number of routine patients at 1 referral clinic. **[ABSTRACT EDITED]**

**Peri-implantitis and the prosthodontist.**

**Author(s):** Dawood, A; Marti, B Marti; Tanner, S

**Source:** British dental journal; Sep 2017; vol. 223 (no. 5); p. 325-332

**Publication Type(s):** Journal Article

**Abstract:** Peri-implantitis has been described as progressive crestal bone loss around a dental implant. The condition is poorly understood, and is challenging to manage; it is commonly and widely attributed to issues with the implant, the implant surface, surgical technique and oral hygiene. The effect of prosthodontic stages of treatment on the postoperatively established state has not been adequately investigated. It is the authors' contention that the manner in which the implant is restored contributes significantly to prognosis and peri-implant disease experience, and that the role of prosthodontic aspects of treatment in the causation of peri-implantitis may be seriously underestimated. **[ABSTRACT EDITED]**

### **Parameters to Define Peri-implantitis: A Review And A Proposed Multi-Domain Scale.**

**Author(s):** Lin, Guo-Hao; Kapila, Yvonne; Wang, Hom-Lay

**Source:** The Journal of oral implantology; Sep 2017

**Publication Type(s):** Journal Article

**Abstract:** Peri-implant diseases have received much attention since dental implants are generally used in contemporary dentistry. Several contributing factors associated with the development of peri-implant diseases have also been investigated. The prevalence of peri-implantitis has been reported but with great heterogeneity due to a lack of a universally accepted classification system to define the extent and severity of peri-implantitis. Several parameters, including radiographic bone loss, probing depth, bleeding on probing, and suppuration, have been introduced in these reports aiming to assist with clinical diagnosis. This article aims to provide an objective evaluation of these parameters based on currently available evidence, provide further recommendations, and propose a multi-domain scale for diagnosis of peri-implantitis. Future investigations and modifications may be needed to develop a comprehensive, evidence-based classification system that addresses the multifactorial etiology of peri-implant diseases.

### **Minimally invasive removal of nonmobile zygomatic dental implants affected by peri-implantitis and chronic sinusitis.**

**Author(s):** Anitua, Eduardo; Alkhraisat, Mohammad Hamdan

**Source:** The Journal of oral implantology; Sep 2017

**Publication Type(s):** Journal Article

### **Role of toll-like receptor 2 in inflammation and alveolar bone loss in experimental peri-implantitis versus periodontitis.**

**Author(s):** Yu, X; Hu, Y; Freire, M; Yu, P; Kawai, T; Han, X

**Source:** Journal of periodontal research; Sep 2017

**Publication Type(s):** Journal Article

**Abstract:** BACKGROUND AND OBJECTIVE Peri-implantitis and periodontitis are different entities in immune characteristics even though they share similar features in clinical and radiologic signs. Toll-like receptor 2 (TLR-2), one of the key pathogen-recognition receptors in the innate immune system,

plays an important role in the progression of periodontitis. However, the role of TLR-2 in peri-implantitis remains unclear. The objective of this study was to investigate the role of TLR-2 in inflammation and alveolar bone loss in a murine model of ligature-induced peri-implantitis and to compare it with ligature-induced periodontitis. [ABSTRACT EDITED]

#### **Analysis of CD15, CD57 and HIF-1 $\alpha$ in biopsies of patients with peri-implantitis.**

**Author(s):** de Araújo, Márcia Fernandes; Etchebehere, Renata Margarida; de Melo, Marcelo Luiz Ribeiro; Beghini, Marcela; Severino, Viviane Oliveira; de Castro Côbo, Eliângela; Rocha Rodrigues, Denise Bertulucci; de Lima Pereira, Sanívia Aparecida

**Source:** Pathology, research and practice; Sep 2017; vol. 213 (no. 9); p. 1097-1101

**Publication Type(s):** Journal Article

**Abstract:** Peri-implantitis is an infectious disease characterized by inflammation of the tissues surrounding the implant, bleeding on probing with or without suppuration, and bone loss. Peri-implant lesions contain a leukocyte infiltrate of plasma cells, lymphocytes, macrophages and neutrophils. A survey of the literature did not show any studies reporting an association between hypoxia and peri-implantitis. The aim of the present cross-sectional study was to evaluate histological changes and immunostaining for CD15, CD57 and HIF-1 $\alpha$  in the peri-implant mucosa of patients with and without peri-implantitis. [ABSTRACT EDITED]

#### **Cytokine and microbial profiles in relation to the clinical outcome following treatment of peri-implantitis.**

**Author(s):** Renvert, Stefan; Widén, Cecilia; Persson, Rutger G

**Source:** Clinical oral implants research; Sep 2017; vol. 28 (no. 9); p. 1127-1132

**Publication Type(s):** Journal Article

**Abstract:** AIM To study whether cytokine levels and bacterial counts in patients with peri-implantitis reflect clinical treatment outcome following non-surgical management. MATERIALS AND [ABSTRACT EDITED]

## **Bisphosphonate-related osteonecrosis of the jaw**

#### **Treatment of bisphosphonate-related osteonecrosis of the jaw using platelet-rich fibrin.**

**Author(s):** Gönen, Zeynep Burçin; Asan, Canay Yılmaz; Yılmaz Asan, Canay

**Source:** CRANIO: The Journal of Craniomandibular & Sleep Practice; Sep 2017; vol. 35 (no. 5); p. 332-336

**Publication Type(s):** Academic Journal

**Abstract:** Background: Bisphosphonates are commonly prescribed antiresorptive agents for the management of patients with osteoporosis, Paget's disease, multiple myeloma, and metastatic tumors. Platelet-rich fibrin (PRF) is a second generation platelet concentrate, and has the ability of regulating the inflammation and stimulation of chemotactic agents. The aim of this report is to present the treatment of Stage-3 bisphosphonate-related osteonecrosis of the jaw (BRONJ) by PRF. Clinical Presentation: A 77-year-old male patient with Stage-3 BRONJ was treated with minimal surgical operations and PRF membrane. The patient was followed up for 18 months, and there was no recurrence or exposure. Conclusion: PRF may promote the healing of both bone and soft tissues

even in Stage-3 patients. This technique is an alternative treatment modality for the closure of bone exposure and tissue healing in BRONJ patients.

### **Attitudes and perceptions of GPs and community pharmacists towards their role in the prevention of bisphosphonate-related osteonecrosis of the jaw: a qualitative study in the North East of England.**

**Author(s):** Sturrock, Andrew; Preshaw, Philip M; Hayes, Catherine; Wilkes, Scott

**Source:** BMJ open; Sep 2017; vol. 7 (no. 9); p. e016047

**Publication Type(s):** Journal Article

Available at [BMJ open](#) - from HighWire - Free Full Text

**Abstract:**BACKGROUND Bisphosphonate-related osteonecrosis of the jaw (BRONJ) is a rare, yet significant, adverse effect of bisphosphonate therapy. A multidisciplinary approach to the prevention of BRONJ is recommended due to the significant morbidity and difficulty treating the condition. Current evidence suggests that both general practitioners (GPs) and community pharmacists have limited knowledge relating to BRONJ and that preventative strategies are rarely implemented. OBJECTIVE To explore the attitudes and perceptions of GPs and community pharmacists on the risks and preventative strategies for the development of BRONJ. [ABSTRACT EDITED]

## **Dental-related cleft lip and palate**

### **A prospective longitudinal study of postnatal dentoalveolar and palatal growth: The anatomical basis for CAD/CAM-assisted production of cleft-lip-palate feeding plates**

**Author(s):** Bauer F.X.; Gau D.; Gruber M.; Eblenkamp M.; Gull F.D.; Roth M.; Ritschl L.M.;

**Source:** Clinical Anatomy; Oct 2017; vol. 30 (no. 7); p. 846-854

**Publication Type(s):** Article

**Abstract:**This study describes the dentoalveolar and palatal growth during the first months of life. Knowledge concerning this development is essential to avoid unwanted events such as mucosal ulcerations or restriction of growth when cleft-lip and palate (CLP) patients are treated. The results involve the generation of CAD/CAM CLP-feeding plates. Intraoral impressions from 32 healthy newborns were taken monthly for 5 months, supplemented by measurements of body weight, length, and occipital-frontal head circumference. [ABSTRACT EDITED]

### **Global search trends of oral problems using google trends from 2004 to 2016: An exploratory analysis**

**Author(s):** Patthi B.; Kumar J.K.; Singla A.; Gupta R.; Prasad M.; Ali I.; Dhama K.; Niraj L.K.

**Source:** Journal of Clinical and Diagnostic Research; Sep 2017; vol. 11 (no. 9)

**Publication Type(s):** Article

Available at [Journal of Clinical and Diagnostic Research](#) - from Europe PubMed Central - Open Access

**Abstract:**Introduction: Oral diseases are pandemic cause of morbidity with widespread geographic distribution. This technology based era has brought about easy knowledge transfer than traditional

dependency on information obtained from family doctors. Hence, harvesting this system of trends can aid in oral disease quantification. Aim: To conduct an exploratory analysis of the changes in internet search volumes of oral diseases by using Google Trends© (GT©). **[ABSTRACT EDITED]**

**The development of the cleft aesthetic rating scale: A new rating scale for the assessment of nasolabial appearance in complete unilateral cleft lip and palate patients**

**Author(s):** Mosmuller D.G.M.; Mennes L.M.; Van Couwelaar G.M.; Niessen F.B.; Don Griot J.P.W.

**Source:** Cleft Palate-Craniofacial Journal; Sep 2017; vol. 54 (no. 5); p. 555-561

**Publication Type(s):** Article

**Abstract:**Objective: The development of the Cleft Aesthetic Rating Scale, a simple and reliable photographic reference scale for the assessment of nasolabial appearance in complete unilateral cleft lip and palate patients. **[ABSTRACT EDITED]**

**Alveolar bone raft: Clinical profile and risk factors for complications in oral cleft patients**

**Author(s):** Pessoa E.A.M.; Tannure P.N.; Braune A.; Casado P.L.

**Source:** Cleft Palate-Craniofacial Journal; Sep 2017; vol. 54 (no. 5); p. 530-534

**Publication Type(s):** Article

**Abstract:**Objective: The aim of this study was to investigate clinical aspects and predisposing factors for alveolar bone graft complications in persons born with oral clefts. **[ABSTRACT EDITED]**

**Assessment of complete unilateral cleft lip and palate treatment outcome using EUROCRAN index and associated factors**

**Author(s):** Arshad A.I.; Alam M.K.; Khamis M.F.

**Source:** International Journal of Pediatric Otorhinolaryngology; Sep 2017; vol. 100 ; p. 91-95

**Publication Type(s):** Article

**Abstract:**Objectives Assessment of treatment outcome is the only non-invasive approach to identify the effects of cleft lip and palate repair and modify management accordingly. Here the aim is to assess the outcome of complete unilateral cleft lip and palate (CUCLP) patients using EUROCRAN index and to check whether there are any factors associated with the treatment outcome. **[ABSTRACT EDITED]**

## Periodontal disease and antibiotics

**No association between periodontitis and preterm low birth weight: a case-control study.**

**Author(s):** Fogacci, Mariana Fampa; Cardoso, Elaine de O C; Barbirato, Davi da S;

**Source:** Archives of gynecology and obstetrics; Oct 2017

**Publication Type(s):** Journal Article

**Abstract:**PURPOSEThis study aimed to investigate the association between periodontitis in pregnant women and adverse pregnancy outcomes by heeding confounding risk factors for preterm low birth weight infants. **[ABSTRACT EDITED]**

**What exactly distinguishes aggressive from chronic periodontitis: is it mainly a difference in the degree of bacterial invasiveness?**

**Author(s):** Van der Velden, Ubele

**Source:** Periodontology 2000; Oct 2017; vol. 75 (no. 1); p. 24-44

**Publication Type(s):** Journal Article Review

**Abstract:**At the International Workshop for Classification of Periodontal Diseases and Conditions in 1999, the classification of aggressive and chronic periodontitis that is presently used was introduced. A literature review of papers published in 2015 and having aggressive periodontitis in the title revealed that most studies use this terminology but it is questionable whether all established criteria were really applied correctly. Review of the literature showed no qualitative differences between aggressive and chronic periodontitis regarding bacterial and viral aspects. It is also unlikely that there are major immunologic differences between aggressive and chronic periodontitis. **[ABSTRACT EDITED]**

**Periodontitis: facts, fallacies and the future.**

**Author(s):** Slots, Jørgen

**Source:** Periodontology 2000; Oct 2017; vol. 75 (no. 1); p. 7-23

**Publication Type(s):** Journal Article Review

**Abstract:**This volume of Periodontology 2000 represents the 25th anniversary of the Journal, and uses the occasion to assess important advancements in periodontology over the past quarter-century as well as the hurdles that remain. **[ABSTRACT EDITED]**

**Management of Dens Invaginatus Type II Associated with Immature Apex and Large Periradicular Lesion Using Platelet-rich Fibrin and Biodentine.**

**Author(s):** Goel, Shruti; Nawal, Ruchika Roongta; Talwar, Sangeeta

**Source:** Journal of endodontics; Oct 2017; vol. 43 (no. 10); p. 1750-1755

**Publication Type(s):** Journal Article

**Abstract:**Dens invaginatus (DI) poses peculiar challenges in endodontic treatment of teeth because of distortion of pulpal space. A case of Oehlers type II DI with open apex and large periapical lesion is reported. The case was managed using cone-beam computed tomography (CBCT), operating microscope, platelet-rich fibrin (PRF), and Biodentine. **[ABSTRACT EDITED]**

**Antibiotic Use in 2016 by Members of the American Association of Endodontists: Report of a National Survey.**

**Author(s):** Germack, Mark; Sedgley, Christine M; Sabbah, Wael; Whitten, Brian

**Source:** Journal of endodontics; Oct 2017; vol. 43 (no. 10); p. 1615-1622

**Publication Type(s):** Journal Article

**Abstract:**INTRODUCTIONThis study surveyed the antibiotic prescribing practices of endodontists, and data were compared with previous surveys conducted in 1994 and 1999. **[ABSTRACT EDITED]**



**Advanced Scaffolds for Dental Pulp and Periodontal Regeneration.**

**Author(s):** Bottino, Marco C; Pankajakshan, Divya; Nör, Jacques E

**Source:** Dental clinics of North America; Oct 2017; vol. 61 (no. 4); p. 689-711

**Publication Type(s):** Journal Article Review

**Abstract:**No current therapy promotes root canal disinfection and regeneration of the pulp-dentin complex in cases of pulp necrosis. Antibiotic pastes used to eradicate canal infection negatively affect stem cell survival. Three-dimensional easy-to-fit antibiotic-eluting nanofibers, combined with injectable scaffolds, enriched or not with stem cells and/or growth factors, may increase the likelihood of achieving predictable dental pulp regeneration. Periodontitis is an aggressive disease that impairs the integrity of tooth-supporting structures and may lead to tooth loss. The latest advances in membrane biomodification to endow needed functionalities and technologies to engineer patient-specific membranes/constructs to amplify periodontal regeneration are presented.

**Long-term outcomes of implants placed after vertical alveolar ridge augmentation in partially edentulous patients: a 10-year prospective clinical study.**

**Author(s):** Rocuzzo, Mario; Savoini, Matteo; Dalmaso, Paola; Ramieri, Guglielmo

**Source:** Clinical oral implants research; Oct 2017; vol. 28 (no. 10); p. 1204-1210

**Publication Type(s):** Journal Article

**Abstract:**AIMThe aim of this study was to evaluate the long-term clinical results around non-submerged implants placed after vertical alveolar ridge augmentation. **[ABSTRACT EDITED]**

**Antibacterial activities of natural lichen compounds against Streptococcus gordonii and Porphyromonas gingivalis.**

**Author(s):** Sweidan, Alaa; Chollet-Krugler, Marylène; Sauvager, Aurélie

**Source:** Fitoterapia; Sep 2017; vol. 121 ; p. 164-169

**Publication Type(s):** Academic Journal

**Abstract:**The oral bacteria not only infect the mouth and reside there, but also travel through the blood and reach distant body organs. If left untreated, the dental biofilm that can cause destructive inflammation in the oral cavity may result in serious medical complications. In dental biofilm, Streptococcus gordonii, a primary oral colonizer, constitutes the platform on which late pathogenic colonizers like Porphyromonas gingivalis, the causative agent of periodontal diseases, will bind. The aim of this study was to determine the antibacterial activity of eleven natural lichen compounds belonging to different chemical families and spanning from linear into cyclic and aromatic structures to uncover new antibiotics which can fight against the oral bacteria. **[ABSTRACT EDITED]**

**MECHANICAL AND ANTIBIOTIC PERIODONTAL THERAPIES MAY BE NO DIFFERENT IN TERMS OF TOOTH LOSS IN PATIENTS WITH CHRONIC PERIODONTITIS.**

**Author(s):** Devji, Tahira

**Source:** Journal of the American Dental Association (JADA); Sep 2017; vol. 148 (no. 9)

**Publication Type(s):** Academic Journal

**Abstract:**Clinical relevance. Tooth loss may result as a consequence of untreated periodontitis or failed periodontal therapy. It is important for clinicians to have evidence about how the periodontal treatment strategy used may influence long-term tooth loss when making clinical decisions. Study summary. The researchers conducted a randomized clinical trial to determine the 5-year clinical outcome of therapy in terms of tooth loss in patients treated with 4 alternative periodontitis treatment modalities. **[ABSTRACT EDITED]**

**Electrospun polymeric nanofibers: New horizons in drug delivery.**

**Author(s):** Thakkar, Shreya; Misra, Manju

**Source:** European journal of pharmaceutical sciences : official journal of the European Federation for Pharmaceutical Sciences; Sep 2017; vol. 107 ; p. 148-167

**Publication Type(s):** Journal Article Review

**Abstract:**Nanofibers obtained using electrospinning technique are being used since ages especially in fields of textile industry, sensors, filters, protective clothing and tissue engineering. Their use as drug delivery system is an emerging platform in the field of pharmaceuticals and now-a-days formulation scientists are paying great attention to the technology due to several advantages prime being easy modulation of drug release profile depending upon the properties of polymer/polymeric blends/other materials used. Although there are several reports citing the use of antibiotics-loaded nanofibers as wound dressing materials and as antimicrobial therapy in periodontics; still there is a good scope of expanding the horizon for its application in newer ailments. This article reviews various aspects related to loading and release of drug as such or in nano-particulate form to polymeric nanofibers by taking critical process parameters (CPPs) for electrospinning and critical material attributes (CMAs) into account**[ABSTRACT EDITED]**

**Revascularization-associated Intracanal Calcification: Assessment of Prevalence and Contributing Factors.**

**Author(s):** Song, Minju; Cao, Yangpei; Shin, Su-Jung; Shon, Won-Jun; Chugal, Nadia; Kim, Reuben H

**Source:** Journal of endodontics; Sep 2017

**Publication Type(s):** Journal Article

**Abstract:**INTRODUCTIONIntracanal calcifications have been reported in endodontic cases after revascularization. The purpose of the current study was to determine the incidence of intracanal calcification and potential contributing factors in retrospective revascularization cases. **[ABSTRACT EDITED]**

**A timeline of hydrogen sulfide (H<sub>2</sub>S) research: From environmental toxin to biological mediator.**

**Author(s):** Szabo, Csaba

**Source:** Biochemical pharmacology; Sep 2017

**Publication Type(s):** Journal Article Review

**Abstract:**The history of H<sub>2</sub>S - as an environmental toxin - dates back to 1700, to the observations of the Italian physician Bernardino Ramazzini, whose book "De Morbis Artificum Diatriba" described the painful eye irritation and inflammation of "sewer gas" in sewer workers. The gas has subsequently been identified as hydrogen sulfide (H<sub>2</sub>S), and opened three centuries of research into the biological roles of H<sub>2</sub>S. **[ABSTRACT EDITED]**

**The Effect of Nonsurgical Periodontal Therapy on the Level of Human Neutrophil Peptides 1-3 in Patients with Aggressive Periodontitis.**

**Author(s):** Dolińska, Ewa; Skurska, Anna; Dymicka-Piekarska, Violetta; Milewski, Robert;

**Source:** Oral health & preventive dentistry; Sep 2017 ; p. 1-5

**Publication Type(s):** Journal Article

**Abstract:**PURPOSETo assess the presence of HNP1-3 in the gingival crevicular fluid (GCF) of patients suffering from aggressive periodontitis before and after nonsurgical periodontal therapy. **[ABSTRACT EDITED]**

**The cost-effectiveness of oral health interventions: A systematic review of cost-utility analyses.**

**Author(s):** Hettiarachchi, Ruvini M; Kularatna, Sanjeewa; Downes, Martin J; Byrnes, Joshua

**Source:** Community dentistry and oral epidemiology; Sep 2017

**Publication Type(s):** Journal Article

**Abstract:**OBJECTIVESTo assess the usage of cost-utility analysis (CUA) in oral health interventions and to evaluate the methods used and the reporting quality of CUA in publications on oral health interventions. **[ABSTRACT EDITED]**

**1Combination of Ultrasonic Decontamination, Soft Tissue Curettage and Submucosal Air Polishing With Povidone-Iodine Application for Non-Surgical Therapy of Peri-Implantitis: 12 Months Clinical Outcomes.**

**Author(s):** Stein, Jamal M; Hammächer, Christian; Said-Yekta Michael, Sareh

**Source:** Journal of periodontology; Sep 2017 ; p. 1-13

**Publication Type(s):** Journal Article

**Abstract:**BACKGROUNDThe aim of this study was to evaluate the clinical outcomes of a concept for non-surgical peri-implantitis combining stepwise mechanical debridement measures with adjuvant Povidone-iodine application with and without systemic antibiotics. **[ABSTRACT EDITED]**

**Feline leukocyte adhesion (CD18) deficiency caused by a deletion in the integrin  $\beta 2$  (ITGB2) gene.**

**Author(s):** Bauer, Thomas R; Pratt, Suzanne M; Palena, Christina M; Raj, Karthik; Giger, Urs

**Source:** Veterinary clinical pathology; Sep 2017; vol. 46 (no. 3); p. 391-400

**Publication Type(s):** Journal Article

**Abstract:**BACKGROUNDLeukocyte adhesion deficiency (LAD) or CD18 deficiency is an autosomal recessive immunodeficiency which has been described in people, cattle, dogs, and knockout mice.OBJECTIVESThe study goals were to characterize the clinicopathologic, immunologic, and molecular genetic features of feline LAD (FLAD) in a neutered male adult Domestic Longhair cat with severe leukocytosis and recurrent infections. **[ABSTRACT EDITED]**

**Aggregatibacter actinomycetemcomitans serotype prevalence and antibiotic resistance in a UK population with periodontitis.**

**Author(s):** Akrivopoulou, Chaido; Green, Ingrid M; Donos, Nikolaos; Nair, Sean P; Ready, Derren

**Source:** Journal of global antimicrobial resistance; Sep 2017; vol. 10 ; p. 54-58

**Publication Date:** Sep 2017 **Publication Type(s):** Journal Article

**Abstract:** OBJECTIVES Aggregatibacter actinomycetemcomitans is a recognised pathogen involved in aggressive periodontitis. Seven serotypes of A. actinomycetemcomitans exist with a range of virulence and distribution dependent on ethnicity and geography. The ability of A. actinomycetemcomitans to invade soft tissue can necessitate the use of systemic antibiotics for treatment, however variations in its antibiotic susceptibility exist dependent on geographical location. [ABSTRACT EDITED]

### **An early report: a modified porphyrin-linked metronidazole targeting intracellular Porphyromonas gingivalis in cultured oral epithelial cells.**

**Author(s):** Ye, Ping; Chang, Jiho; Foo, Lin Feng; Yap, Benjamin C-M

**Source:** International journal of oral science; Sep 2017; vol. 9 (no. 3); p. 167-173

**Publication Type(s):** Journal Article

**Abstract:** Porphyromonas gingivalis (P. gingivalis) has a strong association with the pathogenesis of periodontal disease. Recurrence of periodontal disease following therapy is attributed to numerous factors, and of growing interest is the potential problem of intracellular bacteria that are able to persist and multiply within the host cell, thereby facilitating relapse of infection. The effect of antibiotic therapy in controlling P. gingivalis is questionable. Accordingly, while metronidazole is very effective against anaerobic extracellular P. gingivalis by disrupting the DNA of anaerobic microbial cells, this antibiotic does not effectively penetrate into mammalian cells to inhibit intracellular bacteria. Therefore in the present study, a modified porphyrin-linked metronidazole adducts, developed in our laboratory, was used to kill intracellular P. gingivalis. A series of experiments were performed, including cytotoxicity assays and cellular uptake of adducts by flow cytometry coupled with live cell imaging analysis, P. gingivalis invasion and elimination assays, and the analysis of colocalization of P. gingivalis and porphyrin-linked metronidazole by confocal laser scanning microscopy. Findings indicated that P. gingivalis and porphyrin-linked metronidazole were colocalized in the cytoplasm, and this compound was able to kill P. gingivalis intracellular with a sufficient culture time. This is a novel antimicrobial approach in the elimination of P. gingivalis from the oral cavity.

## **Dental-related head and neck oncology**

### **Effects of an oral health promotion program in head and neck cancer patients receiving radiation therapy: Results of a prospective cohort study**

**Author(s):** Kim E.; Kim K.S.; Yu T.; Wee C.W.; Jang B.S.; Wu H.G.; Kim J.H.; Jeon S.H.; Choi N.; Lee H.J.

**Source:** International Journal of Radiation Oncology Biology Physics; Oct 2017; vol. 99 (no. 2)

**Publication Type(s):** Conference Abstract

Available at [International journal of radiation oncology, biology, physics](#) - from ScienceDirect

**Abstract:** Purpose/Objective(s): To develop oral health promotion program and evaluate its effectiveness in head and neck cancer (HNC) patients receiving radiotherapy (RT).

Purpose/Objective(s): This was an open-label, non-randomized, prospective study in 84 HNC patients

treated with RT. Dental health promotion program consisted of oral exam, oral health education, fluoride varnish and mouthwash. [ABSTRACT EDITED]

#### **Bridging the gap: PCP and patient needs in head and neck cancer survivor care**

**Author(s):** Berkowitz C.; Allen D.H.; Tenhover J.; Zullig L.L.; Fischer J.E.; Pollak K.I.; Smith S.K.

**Source:** International Journal of Radiation Oncology Biology Physics; Oct 2017; vol. 99 (no. 2)

**Publication Type(s):** Conference Abstract

Available at [International journal of radiation oncology, biology, physics](#) - from ScienceDirect

**Abstract:** Purpose/Objective(s): Although long-term survival for head and neck cancer (HNC) is increasingly common, survivors often have significant side effects and are at high risk for recurrence and secondary malignancy. Current guidelines call for rigorous history, physical exam, and testing in follow-up. Practicalities of medical care necessitate increasing PCP participation in oncologic follow-up visits. However, little is known about the knowledge and comfort of PCPs and their patients in addressing HNC survivorship concerns. Therefore, through a prospective anonymous questionnaire, we surveyed PCPs and HNC patients regarding common post-treatment issues. [ABSTRACT EDITED]

#### **Poor oral health affects survival in head and neck cancer**

**Author(s):** Farquhar D.R.; Weissler M.C.; Zevallos J.P.; Divaris K.; Mazul A.L.; Olshan A.F.

**Source:** Oral Oncology; Oct 2017; vol. 73 ; p. 111-117

**Publication Type(s):** Article

**Abstract:** Introduction Poor oral health has emerged as a risk factor for squamous cell carcinoma of the head and neck (HNSCC) but its impact on survival has not been examined. We sought to estimate the impact of oral health indicators on survival in a population-based HNSCC cohort. [ABSTRACT EDITED]

#### **Head and neck cancer treatment in a developing country: A survey-based study in Brazil**

**Author(s):** Chaves A.L.F.; Carvalho A.L.; Sanabria A.; Trivedi N.P.; Ferrigno R.; Kowalski L.P.

**Source:** Journal of Cancer Policy; Sep 2017; vol. 13 ; p. 18-23

**Publication Type(s):** Article

**Abstract:** Background Head and neck cancers are a heterogeneous group of diseases. There is a lack of studies providing information about the available resources to treat head and neck cancer patients in developing countries. Objective The study aimed to describe the medical resources for treating head and neck cancer patients in Brazil. [ABSTRACT EDITED]

#### **Computed Tomography of the Head and Neck Region for Tumor Staging-Comparison of Dual-Source, Dual-Energy and Low-Kilovolt, Single-Energy Acquisitions**

**Author(s):** May M.S.; Bruegel J.; Brand M.; Wiesmueller M.; Uder M.; Wuest W.; Krauss B

**Source:** Investigative Radiology; Sep 2017; vol. 52 (no. 9); p. 522-528

**Publication Type(s):** Article

**Abstract:** Purpose The aim of this study was to intra-individually compare the image quality obtained by dual-source, dual-energy (DSDE) computed tomography (CT) examinations and different virtual monoenergetic reconstructions to a low single-energy (SE) scan. **[ABSTRACT EDITED]**

**Short dental implants: A scoping review of the literature for patients with head and neck cancer.**

**Author(s):** Edher, Faraj; Nguyen, Caroline T

**Source:** The Journal of prosthetic dentistry; Sep 2017

**Publication Type(s):** Journal Article Review

**Abstract:** STATEMENT OF PROBLEM Dental implants can be essential in the rehabilitation of various cancer defects, but their ideal placement can be complicated by the limited dimensions of the available host bone. Surgical interventions developed to increase the amount of bone are not all predictable or successful and can sometimes be contraindicated. Short dental implants have been suggested as an alternative option in sites where longer implants are not possible. Whether they provide a successful treatment option is unclear. PURPOSE The purpose of this study was to review the literature on short dental implants and assess whether they are a viable definitive treatment option for rehabilitating cancer patients with deficient bone. **[ABSTRACT EDITED]**

## Dental implants

**Comparison of Dental Implant Performance Following Vertical Alveolar Bone Augmentation With Alveolar Distraction Osteogenesis or Autogenous Onlay Bone Grafts: A Retrospective Cohort Study**

**Author(s):** Zhao K.; Wang F.; Huang W.; Wang X.; Wu Y.

**Source:** Journal of Oral and Maxillofacial Surgery; Oct 2017; vol. 75 (no. 10); p. 2099-2114

**Publication Type(s):** Article

**Abstract:** Purpose The aim of this retrospective study was to compare the performance of implants placed after alveolar distraction osteogenesis (ADO) or autogenous onlay bone grafting (AOBG) based on implant survival, peri-implant bone resorption, and clinical parameters. **[ABSTRACT EDITED]**

**Graphene as an Enabling Strategy for Dental Implant and Tissue Regeneration**

**Author(s):** Park C.; Lim H.-P.; Park S.; Lee D.; Kim J.; Choi K.S.

**Source:** Tissue Engineering and Regenerative Medicine; Oct 2017; vol. 14 (no. 5); p. 481-493

**Publication Type(s):** Review

**Abstract:** Graphene-based approaches have been influential in the design and manipulation of dental implants and tissue regeneration to overcome the problems associated with traditional titanium-based dental implants, such as their low biological affinity. Here, we describe the current progress of graphene-based platforms, which have contributed to major advances for improving cellular functions in in vitro and in vivo applications of dental implants. We also present opinions on the principal challenges and future prospects for new graphene-based platforms for the development of advanced graphene dental implants and tissue regeneration. Copyright © 2017, The Korean Tissue Engineering and Regenerative Medicine Society and Springer Science+Business Media Dordrecht.

**Pulse electrodeposition of hydroxyapatite/chitosan coatings on titanium substrate for dental implant**

**Author(s):** Park K.H.; Kim S.-J.; Hwang M.-J.; Song H.-J.; Park Y.-J.

**Source:** Colloid and Polymer Science; Oct 2017; vol. 295 (no. 10); p. 1843-1849

**Publication Type(s):** Article

**Abstract:**In this work, calcium phosphate/chitosan coatings were produced by the pulse electrodeposition method with variation of the deposition cycle and contents of chitosan solution. To investigate the morphology of the crystals and the electrochemical properties of hydroxyapatite/chitosan coating, a uniform hydroxyapatite coating was applied on the Ti-6Al-4 V substrate using the pulse voltage electrodeposition method. **[ABSTRACT EDITED]**

### **Occurrence of trigeminocardiac reflex during dental implant surgery: An observational prospective study**

**Author(s):** Huang J.I.-S.; Yu H.-C.; Chang Y.-C.

**Source:** Journal of the Formosan Medical Association; Oct 2017; vol. 116 (no. 10); p. 742-747

**Publication Type(s):** Article

**Abstract:**Background/Purpose Trigemino-cardiac reflex (TCR) is a clinical phenomenon that manifests as a sudden onset of hemodynamic perturbations. TCR has been reported in cranio-maxillofacial surgery resulting in severe medical risks. Monitoring the hemodynamic changes during cranio-maxillofacial surgery can provide important information to ensure the continuous evaluation of patient's physical conditions. This prospective observational study was conducted to determine the hemodynamic alterations related to the possibility of occurrence of TCR in patients during dental implant surgery. Methods One hundred and thirty-five patients (69 males and 66 females) received dental implant placement were enrolled in this study. The hemodynamic changes were evaluated by monitoring heart rate (HR), systolic blood pressure (SBP), diastolic blood pressure (DBP), and pulse oximetry (SpO<sub>2</sub>). The above data were collected before, during, and after dental implant surgery. Results The data demonstrated that the minimal values of HR, SBP, and DBP as well as MABP decreased significantly during operation comparing with the corresponding values before operation (p Copyright © 2017

### **Tetracycline-incorporated polymer nanofibers as a potential dental implant surface modifier**

**Author(s):** Bottino M.C.; Munchow E.A.; Albuquerque M.T.P.; Kamocki K.; Shahi R.; Gregory R.L.;

**Source:** Journal of Biomedical Materials Research - Part B Applied Biomaterials; Oct 2017; vol. 105 (no. 7); p. 2085-2092

**Publication Type(s):** Article

**Abstract:**This study investigated the antimicrobial and osteogenic properties of titanium (Ti) disks superficially modified with tetracycline (TCH)-incorporated polymer nanofibers. **[ABSTRACT EDITED]**

### **Bisphosphonate releasing dental implant surface coatings and osseointegration: A systematic review**

**Author(s):** Najeeb S.; Zafar M.S.; Khurshid Z.; Zohaib S.; Hasan S.M.; Khan R.S.

**Source:** Journal of Taibah University Medical Sciences; Oct 2017; vol. 12 (no. 5); p. 369-375

**Publication Type(s):** Review

**Abstract:** Objectives Bisphosphonates (BPs) are a class of drugs that are used to treat osteoporosis. It has been suggested that BP coatings on dental implants have a positive effect on new bone formation. The purpose of this review is to analyse the currently available data concerning the clinical and experimental efficacy of BP-releasing titanium implants such that their potential in clinical oral implant dentistry may be ascertained. Methods Based on a literature review, a focused research question was constructed: what is the effect of a BP-releasing coating on the osseointegration of titanium dental implant? The databases of PubMed/MEDLINE; ISI Web of Knowledge; Embase and Google Scholar were searched electronically using the keywords 'dental implant'; 'bisphosphonate' and 'titanium.' The quality; general characteristics and outcomes of each study were summarized and analysed systematically. Results A total of eleven articles fulfilled the criteria to be included in this review. Eight studies were experimental; two studies were clinical; and one study was experimental and clinical. In nine studies (82%), BP-coated implants resulted in higher osseointegration, as indicated by higher resonance frequency values, removal torque, bone-implant contact and new bone formation. In two studies (18%), there was no difference between the osseointegration of BP-coated implants and controls. Conclusions Bisphosphonates-loaded implants may have a positive effect on osseointegration. However, more well-designed clinical studies are required to demonstrate their osseointegrative effects. Copyright © 2017 Taibah University

#### **Antimicrobial effects of three different treatment modalities on dental implant surfaces.**

**Author(s):** Larsen, Olav Inge; Enersen, Morten; Kristoffersen, Anne Karin; Wennerberg, Ann

**Publication Date:** Oct 2017

**Publication Type(s):** Journal Article

**Abstract:** Resolution of peri-implant inflammation and re-osseointegration of peri-implantitis affected dental implants seem to be dependent on bacterial decontamination. The aims of this study were to evaluate the antimicrobial effects of three different instrumentations on a micro-textured dental implant surface contaminated with an avirulent or a virulent *Porphyromonas gingivalis* strain and to determine alterations to the implant surface following instrumentation. **[ABSTRACT EDITED]**

#### **Effect of titanium and zirconia dental implant abutments on a cultivable polymicrobial saliva community.**

**Author(s):** de Avila, Erica D; Vergani, Carlos Eduardo; Mollo Junior, Francisco A;

**Source:** The Journal of prosthetic dentistry; Oct 2017; vol. 118 (no. 4); p. 481-487

**Publication Type(s):** Journal Article

**Abstract:** STATEMENT OF PROBLEM Peri-implantitis is considered the most important biological complication responsible for late implant failure. The physical chemical properties intrinsic to each material can affect the first step to biofilm development and is an important precursor to the adaptive behavior of pathogenic bacteria species. PURPOSE The purpose of this in vitro study was to evaluate the effect of 2 commercially available implant abutment materials on the adhesion phase and biofilm formation. **[ABSTRACT EDITED]**

#### **Osteoporosis may result in a small increase in marginal bone loss around dental implants in osteoporotic women.**

**Author(s):** Brignardello-Petersen, Romina



**Source:** Journal of the American Dental Association (1939); Oct 2017; vol. 148 (no. 10); p. e143

**Publication Type(s):** Journal Article

**Microbiota Analysis of Biofilms on Experimental Abutments Mimicking Dental Implants: An In Vivo Model.**

**Author(s):** Cortés-Acha, Berta; Figueiredo, Rui; Seminago, Ramón; Roig, Francisco J

**Source:** Journal of periodontology; Oct 2017; vol. 88 (no. 10); p. 1090-1104

**Publication Type(s):** Journal Article

**Abstract:**BACKGROUNDThe microbiota colonizing dental implants has been said to be similar to the microbiome surrounding teeth. In the absence of inflammation, a biofilm with pathologic bacteria can cover implant surfaces exposed to the oral cavity, for example, due to a remodeling process. The aim of the present study is to identify microbiota surrounding exposed dental implants in patients with and without a history of periodontitis through a deep-sequencing approach. **[ABSTRACT EDITED]**

**The Use of Cone-Beam Computed Tomography in Management of Patients Requiring Dental Implants: An American Academy of Periodontology Best Evidence Review.**

**Author(s):** Rios, Hector F; Borgnakke, Wenche S; Benavides, Erika

**Source:** Journal of periodontology; Oct 2017; vol. 88 (no. 10); p. 946-959

**Publication Type(s):** Journal Article

**Abstract:**BACKGROUNDApplication of cone-beam computed tomography (CBCT) has grown exponentially across dentistry with a clear impact in implant dentistry. This review aims at providing the scientific context to understand if CBCT imaging should become the standard of care for patients requiring dental implants. **[ABSTRACT EDITED]**

**Incidence and Determinants of Dental Implant Failure: A Review of Electronic Health Records in a U.S. Dental School.**

**Author(s):** Hickin, Matthew Parker; Shariff, Jaffer A; Jennette, Philip J; Finkelstein, Joseph

**Source:** Journal of dental education; Oct 2017; vol. 81 (no. 10); p. 1233-1242

**Publication Type(s):** Journal Article

**Abstract:**The aim of this study was to use electronic health care records (EHRs) to examine retrospectively the incidence of and attributes associated with dental implant failures necessitating implant removal in a large cohort of patients treated in the student clinics of a U.S. dental school over three and a half years. EHRs were searched for all patients who received dental implants between July 1, 2011, and December 31, 2014. **[ABSTRACT EDITED]**

**Incidence and Management of Fractured Dental Implants: Case Reports.**

**Author(s):** Jin, Soo-Young; Kim, Su-Gwan; Oh, Ji-Su; You, Jae-Seek; Jeong, Mi-Ae

**Source:** Implant dentistry; Oct 2017; vol. 26 (no. 5); p. 802-806

**Publication Type(s):** Journal Article

**Abstract:**The fracture of dental implants is a rare occurrence in clinical settings. Possible causes of implant fracture include design or production flaws, overloaded occlusion force, implant location, metal fatigue, and bone resorption around the implant. This study reports on the successful removal and reimplantation of fractured implants.

**Effects of Bacterial Contamination on Dental Implants During Surgery: A Systematic Review.**

**Author(s):** Johansson, Krister; Jimbo, Ryo; Östlund, Pernilla; Tranæus, Sofia; Becktor, Jonas P

**Source:** Implant dentistry; Oct 2017; vol. 26 (no. 5); p. 778-789

**Publication Type(s):** Journal Article

**Abstract:**INTRODUCTIONContamination during surgery negatively influences the prognosis of orthopaedic implants; however, it has not been proven whether contamination influences the success of dental implant treatment. The aim of the systematic review was to investigate if there exists evidence in the literature whether contamination of dental implants during surgery affects osseointegration and clinical success. **[ABSTRACT EDITED]**

**Dental Implants.**

**Author(s):** Griggs, Jason A

**Source:** Dental clinics of North America; Oct 2017; vol. 61 (no. 4); p. 857-871

**Publication Type(s):** Journal Article Review

**Abstract:**Systematic reviews of literature over the period between 2008 and 2017 are discussed regarding clinical evidence for the factors affecting survival and failure of dental implants. The factors addressed include publication bias, tooth location, insertion torque, collar design, implant-abutment connection design, implant length, implant width, bone augmentation, platform switching, surface roughness, implant coatings, and the use of ceramic materials in the implant body and abutment.

**Comparison of clinical and radiographic parameters around short (6 to 8 mm in length) and long (11 mm in length) dental implants placed in patients with and without type 2 diabetes mellitus: 3-year follow-up results.**

**Author(s):** Al Amri, Mohammad D; Abduljabbar, Tariq S; Al-Johany, Sulieman S;

**Source:** Clinical oral implants research; Oct 2017; vol. 28 (no. 10); p. 1182-1187

**Publication Type(s):** Journal Article

**PubMedID:** 27469294

**Abstract:**OBJECTIVETo compare the clinical and radiographic parameters around short (6 to 8 mm in length) and long (11 mm in length) dental implants placed in patients with and without type 2 diabetes mellitus (T2DM). **[ABSTRACT EDITED]**

**On stress/strain shielding and the material stiffness paradigm for dental implants.**

**Author(s):** Korabi, Raoof; Shemtov-Yona, Keren; Rittel, Daniel

**Source:** Clinical implant dentistry and related research; Oct 2017; vol. 19 (no. 5); p. 935-943

**Publication Type(s):** Journal Article

**Abstract:**BACKGROUNDStress shielding considerations suggest that the dental implant material's compliance should be matched to that of the host bone. However, this belief has not been confirmed from a general perspective, either clinically or numerically.PURPOSETo characterize the influence of the implant stiffness on its functionality using the failure envelope concept that examines all possible combinations of mechanical load and application angle for selected stress, strain and displacement-based bone failure criteria. Those criteria represent bone yielding, remodeling, and implant primary stability, respectively **[ABSTRACT EDITED]**

**Resonance frequency analysis of dental implants placed at the posterior maxilla varying the surface treatment only: A randomized clinical trial.**

**Author(s):** Novellino, Marcelo M; Sesma, Newton; Zanardi, Piero R; Laganá, Dalva C

**Source:** Clinical implant dentistry and related research; Oct 2017; vol. 19 (no. 5); p. 770-775

**Publication Type(s):** Journal Article

**Abstract:**BACKGROUNDChemical modifications of the dental implant surface that improve the wettability result in a faster and better osseointegration.PURPOSEThe aim of this randomized clinical trial was to evaluate the implant stability quotient (ISQ) of implants with similar designs, treated with 2 surfaces, sandblasted acid-etched (SAE) and hydrophilic SAE, within the initial 16 weeks of healing. **[ABSTRACT EDITED]**

**Displacement of Dental Implants into the Mandibular Bone Marrow Space - Cause and Treatment.**

**Author(s):** Kim, J.W.; Paeng, J.Y.; Choi, S.Y.; Kwon, T.G.

**Source:** Journal of Oral & Maxillofacial Surgery (02782391); Oct 2017; vol. 75

**Publication Type(s):** Academic Journal

**Grafting of Alveolar Cleft Defects in Preparation for Endosseous Dental Implant Placement and Orthodontic Tooth Movement.**

**Author(s):** Watts, V.; Portnof, J.

**Source:** Journal of Oral & Maxillofacial Surgery (02782391); Oct 2017; vol. 75

**Publication Type(s):** Academic Journal

**Immediate Dental Implant Placement Following Sinus Elevation in Maxillary Bone Levels Less Than 6mm.**

**Author(s):** Young, H.; Kwok, J.; Patel, D.; Patel, V.

**Source:** Journal of Oral & Maxillofacial Surgery (02782391); Oct 2017; vol. 75

**Publication Type(s):** Academic Journal

**The Use of Stereolithographic Models for Optimal Surgical Stent Fabrication in Complex Pre-Prosthetic Vestibuloplasty and Dental Implant Placement: A Case Report.**

**Author(s):** Edwards, J.A.; LoCascio, S.J.; Campbell, J.A.

**Source:** Journal of Oral & Maxillofacial Surgery (02782391); Oct 2017; vol. 75

**Publication Type(s):** Academic Journal

**Oral Abstract Track Three: Dental Implants, Dentoalveolar, Nerve Repair, Other.**

**Author(s):**

**Source:** Journal of Oral & Maxillofacial Surgery (02782391); Oct 2017; vol. 75

**Publication Type(s):** Academic Journal

**Mechanical investigation of newly hybrid dental implants**

**Author(s):** Zietz C.; Vogel D.; Bader R.; Mitrovic A.

**Source:** Biomedizinische Technik; Sep 2017; vol. 62

**Publication Type(s):** Conference Abstract

Available at [Biomedizinische Technik](#) - from EBSCO (MEDLINE Complete)

**Abstract:** Titanium and titanium alloys are common used materials for dental implants, however they have biological limitations for oral use. Ceramics meet the demands of biocompatibility, but their susceptibility to implant fracture is increased. Therefore, a combination of both materials could be an advantage for dental implants. Therefore, a new hybrid implant combining titanium and ceramic components by glass solder fixation was introduced. The aim of the present study was to investigate the static and dynamic mechanical properties of such hybrid implants. **[ABSTRACT EDITED]**

**Assessment of the gingival microcirculation at teeth and dental implants; A preclinical in-vivo pilot study**

**Author(s):** Deak A.; Tanczos B.; Sogor V.; Nemeth N.; Fulop Z.S.; Sari K.; Varga I.; Hegedus C.S.; Stavropoulos A.

**Source:** European Surgical Research; Sep 2017; vol. 58 ; p. 58-59

**Publication Type(s):** Conference Abstract

**Abstract:** Background: Good blood microcirculation is an important feature of healthy gingiva. Periodontal diseases are associated with various microcirculatory impairments, either as the reason and/or the consequence of disease. Little is known about the microcirculation around dental implants. The aim of the study was to non-invasively examine the microcirculation of peri-implant area. **[ABSTRACT EDITED]**

**Refining experimental dental implant testing in the Gottingen Minipig using 3D computed tomography - A morphometric study of the mandibular canal**

**Author(s):** Corte G.M.; Plendl J.; Hunigen H.; Richardson K.C.; Gemeinhardt O.; Niehues S.M.

**Source:** PLoS ONE; Sep 2017; vol. 12 (no. 9)

**Publication Type(s):** Article

Available at [PLoS ONE](#) - from EBSCO (MEDLINE Complete)

**Abstract:** This study reports morphometric and age-related data of the mandibular canal and the alveolar ridge of the Gottingen Minipig to avoid complications during in vivo testing of endosseous dental implants and to compare these data with the human anatomy. Using 3D computed

tomography, six parameters of the mandibular canal as well as the alveolar bone height and the alveolar ridge width were measured in Gottingen Minipigs aged 12, 17 and 21 months. Our null hypothesis assumes that the age and the body mass have an influence on the parameters measured. The study found that the volume, length and depth of the mandibular canal all increase with age. The width of the canal does not change significantly with age. The body mass does not have an influence on any of the measured parameters. The increase in canal volume appears to be due to loss of deep spongy bone in the posterior premolar and molar regions. This reduces the available space for dental implantations, negatively affecting implant stability and potentially the integrity of the inferior alveolar neurovascular bundle. Dynamic anatomical changes occur until 21 months. On ethical grounds, using minipigs younger than 21 months in experimental implant dentistry is inadvisable. Paradoxically the measurements of the 12 months old pigs indicate a closer alignment of their mandibular anatomy to that of humans suggesting that they may be better models for implant studies. Given the variability in mandibular canal dimensions in similar age cohorts, the use of imaging techniques is essential for the selection of individual minipigs for dental prosthetic interventions and thus higher success rates. Copyright © 2017 Corte et al. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

#### **Effects on the torsional vibration behavior in the investigation of dental implant osseointegration using resonance frequency analysis: a numerical approach**

**Author(s):** Zhai M.; Li D.; Li B.

**Source:** Medical and Biological Engineering and Computing; Sep 2017; vol. 55 (no. 9); p. 1649-1658

**Publication Date:** Sep 2017

**Publication Type(s):** Article

**Abstract:** Resonance frequency analysis (RFA) methods are widely used to assess implant stability, particularly the Osstell device. The potential effects associated with this method have been discussed in the literature. Torsional RFA (T-RFA), mentioned in our previous study, could represent a new measurement method. The purpose of this study was to simulate T-shaped and Osstell transducer-implant-bone system models; compare their vibration modes and corresponding resonance frequencies; and investigate the effects of their parameters, such as the effective implant length (EIL), bone quality, and osseointegration level, on the torsional resonance frequency (TRF) and bending resonance frequency (BRF) using three-dimensional finite element analysis. Following the finite element model validation, the TRFs and BRFs for three different EILs and four types of bone quality were obtained, and the change rates during 25 degrees of osseointegration were observed. The analysis showed that an increase in the EIL and a decrease in bone quality have less effect on the declination rate of TRFs than on that of BRFs. TRFs are highly sensitive to the stiffness of the implant-bone interface during the healing period. It was concluded that T-RFA has better sensitivity and specificity. Copyright © 2017, International Federation for Medical and Biological Engineering.

#### **A new concept for implant-borne dental rehabilitation; how to overcome the biological weak-spot of conventional dental implants?**

**Author(s):** Gellrich, Nils-Claudius; Rahlf, Björn; Zimmerer, Rüdiger;

**Source:** Head & face medicine; Sep 2017; vol. 13 (no. 1); p. 17

**Publication Type(s):** Journal Article

Available at [Head & face medicine](#) - from EBSCO (MEDLINE Complete)

**Abstract:**BACKGROUNDEvery endosseous dental implant is dependent on an adequate amount and quality of peri-implant hard and soft tissues and their fully functional interaction. The dental implant could fail in cases of insufficient bone and soft tissues or due to a violation of the soft to hard tissues to implant shoulder interface with arising of a secondary bone loss. **[ABSTRACT EDITED]**

**Comparison of Clinical, Radiographic, and Immunologic Inflammatory Parameters around Crestally and Subcrestally Placed Dental Implants: 5-Year Retrospective Results.**

**Author(s):** Al Amri, Mohammad D; Alfadda, Sara A; Labban, Nawaf Y; Alasqah, Mohammed N

**Source:** Journal of prosthodontics : official journal of the American College of Prosthodontists; Sep 2017

**Publication Type(s):** Journal Article

**Abstract:**PURPOSETo compare changes in clinical (bleeding on probing [BOP] and probing pocket depth [PPD]), radiographic (crestal bone loss [CBL]), and immunologic inflammatory (interleukin-1beta [IL-1 $\beta$ ] and matrix metalloproteinase-9 [MMP-9]) parameters around crestally and subcrestally placed dental implants 5 years after implant placement. **[ABSTRACT EDITED]**

**Heat generation during removal of an abutment screw fragment from dental implants.**

**Author(s):** Arias, Sergio R; Rueggeberg, Frederick A; Mettenburg, Donald; Sharawy, Mohamed;

**Source:** The Journal of prosthetic dentistry; Sep 2017

**Publication Type(s):** Journal Article

**Abstract:**STATEMENT OF PROBLEMLittle information is available on the effect of drilling speed on surrounding bone during the removal of an abutment screw fragment.PURPOSEThe purpose of this in vitro study was to compare, in vitro, the peak temperature increase during the removal of fractured abutment screws from implants placed in a porcine mandible, using drilling speeds of 600 or 2000 rpm. **[ABSTRACT EDITED]**

**Insufficient evidence to support the use of locally delivered bisphosphonates to improve dental implant outcomes.**

**Author(s):** Brignardello-Petersen, Romina

**Source:** Journal of the American Dental Association (1939); Sep 2017

**Publication Type(s):** Journal Article

**Immediate Dental Implant Placement After Removal of Complex Odontoma.**

**Author(s):** de Souza Batista, Fábio Roberto; de Souza Batista, Victor Eduardo; Vechiato-Filho, Aljomar José; Tieghi Neto, Victor; Figueira, Jéssica Araújo; Verri, Fellippo Ramos

**Source:** The Journal of craniofacial surgery; Sep 2017

**Publication Type(s):** Journal Article

**Abstract:**The aim of the authors was to report a clinical case about immediate implant placement after the removal of complex odontoma. A 35-year-old female patient presented to private service complaining about absence of lower right first premolar. The computed tomographic showed

radiopaque attenuation, surrounded by a narrow radiolucency in the area of dental absence, suggesting a mineralized lesion. The surgical removal of lesion was performed by intraoral access with general anesthesia and the implant of  $3.75 \times 10$  mm (Neodent) was placed with the aid of a surgical guide, following the drill sequence established by the manufacturer. No complications were observed after 1 year with the prosthetic rehabilitation.

biologically powerful novel tool that could enhance bone repair in dental implant integration.

#### **Double acid etching treatment of dental implants for enhanced biological properties.**

**Author(s):** Giner, Lluís; Mercadé, Montse; Torrent, Sergi; Punset, Miquel; Pérez, Román A;

**Source:** Journal of applied biomaterials & functional materials; Sep 2017 ; p. 0

**Publication Type(s):** Journal Article

**Abstract:**BACKGROUNDThe topographical features on the surface of dental implants have been considered as a critical parameter for enhancing the osseointegration of implants. In this work, we proposed a surface obtained by a combination of shot blasting and double acid etching. The double acid etching was hypothesized to increase the submicron topography and hence further stimulate the biological properties of the titanium implant. **[ABSTRACT EDITED]**

#### **Minimally invasive removal of nonmobile zygomatic dental implants affected by peri-implantitis and chronic sinusitis.**

**Author(s):** Anitua, Eduardo; Alkhraisat, Mohammad Hamdan

**Source:** The Journal of oral implantology; Sep 2017

**Publication Type(s):** Journal Article

#### **Maximum insertion torque of a novel implant-abutment-interface design for PEEK dental implants.**

**Author(s):** Schwitalla, Andreas Dominik; Zimmermann, Tycho; Spintig, Tobias;

**Source:** Journal of the mechanical behavior of biomedical materials; Sep 2017; vol. 77 ; p. 85-89

**Publication Type(s):** Journal Article

**Abstract:**Frequent reports attest to the various advantages of tapered implant/abutment interfaces (IAIs) compared to other types of interfaces. For this reason, a conical IAI was designed as part of the development of a PEEK (polyetheretherketone)-based dental implant. This IAI is equipped with an apically displaced anti-rotation lock with minimal space requirements in the form of an internal spline. The objective of this study was the determination of the average insertion torque (IT) at failure of this design, so as to determine its suitability for immediate loading, which requires a minimum IT of 32Ncm. 10 implants each made of unfilled PEEK, carbon fiber reinforced ("CFR") PEEK (> 50vol% continuous axially parallel fibers) as well as of titanium were produced and tested in a torque test bench. The average IT values at failure of the unfilled PEEK implants were measured at  $22.6 \pm 0.5$ Ncm and were significantly higher than those of the CFR-Implants ( $20.2 \pm 2.5$ Ncm). The average IT values at failure of the titanium specimens were significantly higher ( $92.6 \pm 2.3$ Ncm) than those of the two PEEK variants. PEEK- and CFR-PEEK-implants in the present form cannot adequately withstand the insertion force needed to achieve primary stability for immediate loading. Nevertheless, the achievable torque resilience of the two PEEK-variants may be sufficient for a two-stage implantation procedure. To improve the torque resistance of the PEEK implant material the development of a new manufacturing procedure is necessary which reinforces the PEEK base with

continuous multi-directional carbon fibers as opposed to the axially parallel fibers of the tested PEEK compound.

**Surgical safety checklist for dental implant and related surgeries.**

**Author(s):** Bidra, Avinash S

**Source:** The Journal of prosthetic dentistry; Sep 2017; vol. 118 (no. 3); p. 442-444

**Publication Type(s):** Journal Article

**Simplified digital workflow for dental implant restoration on a stock abutment using an intraoral scanner: A dental technique.**

**Author(s):** Kim, Jong-Eun; Park, Ji-Hyun; Moon, Hong-Seok; Shim, June-Sung

**Source:** The Journal of prosthetic dentistry; Sep 2017; vol. 118 (no. 3); p. 268-272

**Publication Type(s):** Journal Article

**Abstract:**A straightforward digital restorative method based on a library of stock abutments is presented. Precisely scanned data of laboratory analog components of the stock abutment were obtained using a tabletop scanner to produce the library. The stock abutment and surrounding teeth, opposing arch, and occlusal information were recorded using an intraoral scanner. After transferring the scanned data to computer-aided design software, an appropriate library file for the abutment connected within the mouth was matched in order to design the prosthesis.

**In-office fabrication of dental implant surgical guides using desktop stereolithographic printing and implant treatment planning software: A clinical report.**

**Author(s):** Whitley, Daniel; Eidson, R Scott; Rudek, Ivan; Bencharit, Sompop

**Source:** The Journal of prosthetic dentistry; Sep 2017; vol. 118 (no. 3); p. 256-263

**Publication Type(s):** Journal Article

**Abstract:**Guided surgery is accepted as the most accurate way to place an implant and predictably relate the implant to its definitive prosthesis, although few clinicians use it. However, recent developments in high-quality desktop 3-dimensional stereolithographic printers have led to the in-office fabrication of stereolithographic surgical guides at reduced cost. This clinical report demonstrates a protocol for using a cost-effective, in-office rapid prototyping technique to fabricate a surgical guide for dental implant placement.

**Although Limited Evidence Suggests Patient Perceptions and Expectations for Dental Implants Are Realistic, Many Misconceptions Remain.**

**Author(s):** Farsai, Paul S

**Source:** The journal of evidence-based dental practice; Sep 2017; vol. 17 (no. 3); p. 290-292

**Publication Type(s):** Journal Article

**Abstract:**ARTICLE TITLE AND BIBLIOGRAPHIC INFORMATION What do patients expect from treatment with Dental Implants? Perceptions, expectations and misconceptions: A multicenter study. Yao J, Li M, Tang H, Want P-L, Zhao Y-X, McGrath C, Mattheos N. Clin Oral Implants Res 28(3):261-71.SOURCE OF FUNDING Information not available TYPE OF STUDY/DESIGN: Cross-sectional study (survey).



**Comparison of Proinflammatory Cytokine Levels in Gingival Crevicular Fluid around Dental Implants with Ceramic and Titanium Abutments.**

**Author(s):** Negahdari, Ramin; Rahbar, Mahdi; Fakhrzadeh, Vahid; Eslami, Hosein; Akbari, Taleb;

**Source:** The journal of contemporary dental practice; Sep 2017; vol. 18 (no. 9); p. 831-836

**Publication Type(s):** Journal Article

**Abstract:**BACKGROUND Considering the high success rate of osseointegration, there is ever-increasing use of dental implants. The mechanisms and biologic response of peri-implant tissues are different depending on the biocompatibility of the implant material. The aim of this study was to compare the proinflammatory cytokine levels in the gingival crevicular fluid (GCF) around dental implants with ceramic and titanium abutments. **[ABSTRACT EDITED]**

**Investigation of the mechanical and chemical characteristics of nanotubular and nano-pitted anodic films on grade 2 titanium dental implant materials.**

**Author(s):** Weszl, Miklós; Tóth, Krisztián László; Kientzl, Imre; Nagy, Péter;

**Source:** Materials science & engineering. C, Materials for biological applications; Sep 2017; vol. 78 ; p. 69-78

**Publication Type(s):** Journal Article

**Abstract:**OBJECTIVE The objective of this study was to investigate the reproducibility, mechanical integrity, surface characteristics and corrosion behavior of nanotubular (NT) titanium oxide arrays in comparison with a novel nano-pitted (NP) anodic film. **[ABSTRACT EDITED]**

**Facilitators and barriers influencing the readiness to receive dental implants in a geriatric institutionalised population-A randomized non-invasive interventional study.**

**Author(s):** Merz, Miriam A; Terheyden, Hendrik; Huber, Christian G; Seixas, Azizi A;

**Source:** Gerodontology; Sep 2017; vol. 34 (no. 3); p. 306-312

**Publication Type(s):** Journal Article

**Abstract:**OBJECTIVE Although elderly people have many serious dental issues and are in need of prosthesis, few opt for dental implants. The aim of this study was to investigate barriers that prevent elderly people from receiving dental implants. Specifically, we examined (i) whether the message was delivered before or after the interview had an impact, and (ii) whether it did matter who delivered the message. **[ABSTRACT EDITED]**

**Erratum to: Long-term success of dental implant-supported dentures in postirradiated patients treated for neoplasms of the maxillofacial skeleton: a retrospective study.**

**Author(s):** Wu, Yiqun; Huang, Wei; Zhang, Zhiyong; Zhang, Zhiyuan; Zou, Duohong

**Source:** Clinical oral investigations; Sep 2017; vol. 21 (no. 7); p. 2397-2398

**Publication Type(s):** Published Erratum

**Short (6-mm) dental implants versus sinus floor elevation and placement of longer (≥10-mm) dental implants: a randomized controlled trial with a 3-year follow-up.**

**Author(s):** Bechara, Souheil; Kubilius, Ricardas; Veronesi, Giovanni; Pires, Jefferson T; Shibli, Jamil A;

**Source:** Clinical oral implants research; Sep 2017; vol. 28 (no. 9); p. 1097-1107

**Publication Type(s):** Journal Article

**Abstract:**OBJECTIVESTo investigate whether short (6-mm) dental implants could be an alternative to sinus floor elevation (SFE) and placement of longer ( $\geq 10$ -mm) implants in the posterior maxilla.

[ABSTRACT EDITED]

**Factors affecting the possibility to detect buccal bone condition around dental implants using cone beam computed tomography.**

**Author(s):** Liedke, Gabriela S; Spin-Neto, Rubens; da Silveira, Heloisa E D; Schropp, Lars;

**Source:** Clinical oral implants research; Sep 2017; vol. 28 (no. 9); p. 1082-1088

**Publication Type(s):** Journal Article

**Abstract:**OBJECTIVESTo evaluate factors with impact on the conspicuity (possibility to detect) of the buccal bone condition around dental implants in cone beam computed tomography (CBCT) imaging.

[ABSTRACT EDITED]

**What is the effect of soft tissue thickness on crestal bone loss around dental implants? A systematic review.**

**Author(s):** Akcalı, Aliye; Trullenque-Eriksson, Anna; Sun, Chuanming; Petrie, Aviva; Nibali, Luigi;

**Source:** Clinical oral implants research; Sep 2017; vol. 28 (no. 9); p. 1046-1053

**Publication Type(s):** Journal Article Review

**Abstract:**OBJECTIVESThe aim of this systematic review was to determine whether soft tissue biotype at implant placement has an influence on crestal bone loss (CBL) at 1 year after implant loading.

[ABSTRACT EDITED]

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