

# Restorative Dentistry

## **Current Awareness Newsletter**

### June 2017 (Bimonthly)



Respecting everyone Embracing change Recognising success Working together Our hospitals.



### **Training Sessions 2017**

### All sessions are 1 hour

#### July (13.00-14.00)

3rd (Mon) Interpreting Statistics

12th (Wed) Critical Appraisal

21st (Fri) Literature Searching

26th (Wed) Interpreting Statistics

#### August (12.00-13.00)

4th (Fri) Critical Appraisal

9th (Wed) Literature Searching

15th (Tues) Interpreting Statistics

24th (Thurs) Critical Appraisal

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### **Contents**

Training Sessions 2017	2
	2
Your Outreach Librarian – Jo Hooper	2
The Latest Evidence for Restorative Dentistry	4
NICE National Institute for Health and Care Excellence	4
Cochrane Library	5
UpToDate®	5
The Dental Elf	
Current Awareness Database Articles on Restorative Dentistry	8
Peri-implantitis	8
Bisphosphonate-related osteonecrosis of the jaw	11
Dental-related cleft lip and palate	12
Periodontal disease and antibiotics	14
Dental-related head and neck oncology	19
Dental implants	23
Journal Tables of Contents	33
British Dental Journal	34
Evidence-Based Dentistry	34
International Journal of Oral and Maxillofacial Implants	34
International Journal of Prosthodontics	34
Journal of Clinical Periodontology	34
Exercise: Research Designs	35
Library Opening Times	36

### The Latest Evidence for Restorative Dentistry

NICE National Institute for Health and Care Excellence

In vitro biological outcome of laser application for modification or processing of titanium dental implants

Source: PubMed - 27 April 2017 - Publisher: Lasers In Medical Science

Effectiveness of hyperbaric oxygen therapy in irradiated maxillofacial dental implant patients: A systematic review with meta-analysis

Source: <u>PubMed</u> - 01 April 2017 - Publisher: Journal Of Indian Prosthodontic Society

<u>Is there a consensus on antibiotic usage for dental implant placement in healthy patients?</u> Source: <u>PubMed</u> - 25 May 2017 - Publisher: Australian Dental Journal

Success rate and complications associated with dental implants in the incisive canal region: a systematic review

Source: <u>PubMed</u> - 25 May 2017 - Publisher: International Journal Of Oral And Maxillofacial Surgery

<u>The Impact of Residual Subgingival Cement on Biological Complications</u> <u>Around Dental Implants: A Systematic Review</u>

Source: PubMed - 21 April 2017 - Publisher: Implant Dentistry

Immediate implant placement into fresh extraction sockets versus delayed implants into healed sockets: A systematic review and meta-analysis

Source: PubMed - 03 May 2017 - Publisher: International Journal Of Oral And Maxillofacial Surgery

Does local delivery of bisphosphonates influence the osseointegration of titanium implants? A systematic review

Source: PubMed - 15 May 2017 - Publisher: International Journal Of Oral And Maxillofacial Surgery

<u>Soft Tissue Changes Around Immediately Placed Implants: A Systematic Review and Meta-</u> analyses With at Least 12 Months Follow up After Functional Loading

Source: PubMed - 18 May 2017 - Publisher: Journal Of Periodontology

Prevalences of Peri-implantitis and Peri-Implant Mucositis: Systematic Review and Meta-Analysis

Source: PubMed - 03 May 2017 - Publisher: Journal Of Dentistry



### Treating periodontal disease for preventing adverse birth outcomes in pregnant women

Zipporah Iheozor-Ejiofor, Philippa Middleton, Marco Esposito, Anne-Marie Glenny

**Online Publication Date: June 2017** 

### Interventions for replacing missing teeth: implant placement at different levels in relation to crestal bone

Ismael Khouly, Analia Veitz-Keenan, Peter Michael Loomer, Marco Esposito

**Online Publication Date: April 2017** 

### Oral hygiene programmes for people with intellectual disabilities

Catherine Waldron, Caoimhin MacGiolla Phadraig, June Nunn, Catherine Comiskey, Erica Donnelly-Swift, Suzanne Guerin, Mike J Clarke

**Online Publication Date: April 2017** 

### Chlorhexidine mouthrinse as an adjunctive treatment for gingival health

Patrice James, Helen V Worthington, Carmel Parnell, Mairead Harding, Thomas Lamont, Andrea Cheung, Helen Whelton, Philip Riley

**Online Publication Date: March 2017** 

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**Gingivitis and periodontitis in adults: Classification and dental treatment** 

- o <u>Peri-implantitis</u>
- o <u>Summary</u>

### Risks of bisphosphonate therapy in patients with osteoporosis

- o Osteonecrosis of the jaw
- o <u>Summary and recommendations</u>
- 0

### Medication-related osteonecrosis of the jaw in patients with cancer

- o <u>Prevention</u>
- o <u>Dentoalveolar surgery</u>
- o <u>Summary</u>

Medication-related osteonecrosis of the jaw in patients with cancer		
	0	Prevention
	0	Summary and recommendations
<u>Manager</u>	nent	and prevention of complications during initial treatment of head and neck
<u>cancer</u>		
	0	Dental issues
	0	Summary and recommendations
Oral heal	<u>lth ir</u>	n cancer survivors
	0	Malignancy
	0	Abnormal dental development
	0	Summary and recommendations
Manager	nent	of late complications of head and neck cancer and its treatment
	0	Dental issues
	0	Summary and Recommendations

0

# The Dental Elf

### Removable partial dentures and quality of life

Jun 28 2017

The aim of this review was to assess the influence of removable partial denture (RPD) therapy on satisfaction and quality of life (QoL).

### Tooth socket preservation using autologous platelet concentrates

Jun 26 2017

The aim of this review was to assess the effectiveness of autologous platelet concentrates (APCs) in the preservation of fresh extraction sockets

### Computer-engineered complete dentures

Jun 23 2017

The aim of this review was to assess the clinical complications associated with CECDs.



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### Current Awareness 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: <u>library@uhbristol.nhs.uk</u>

### **Peri-implantitis**

Histologic Evaluation of Sinus Grafting Materials After Peri-implantitis-Induced Failure: A Case Series.

Author(s): Scarano, Antonio; Cholakis, Anastasia Kelekis; Piattelli, Adriano

Source: The International journal of oral & maxillofacial implants; ; vol. 32 (no. 2); p. e69

Publication Type(s): Case Reports Journal Article

**Abstract:**PURPOSEThis human case series presents the clinical and histologic results of five cases of peri-implantitis with subsequent sinus graft infections. Complications may follow maxillary sinus augmentation procedures. It is possible to have an inflammatory reaction, movement of the implant inside the sinus, formation of an insufficient quantity of osseous tissue, and the production of an oroantral fistula. Complications following maxillary subantral augmentation procedures are relatively rare; however, the risks and benefits of any surgery must be carefully evaluated at the onset. **[ABSTRACT EDITED]** 

### The Impact of Implant Design, Defect Size, and Type of Superstructure on the Accessibility of Nonsurgical and Surgical Approaches for the Treatment of Peri-implantitis.

Author(s): Polak, David; Maayan, Efrat; Chackartchi, Tali

Source: The International journal of oral & maxillofacial implants; ; vol. 32 (no. 2); p. 356

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

**Abstract:**PURPOSEThe success of nonsurgical or surgical treatments of peri-implantitis is unpredictable, often without a clear reason. The aim of this study was to investigate the efficacy of nonsurgical and surgical cleaning, focusing on the impact of implant design, defect size, type of superstructure, and experience of the operator. **[ABSTRACT EDITED]** 

#### A randomized clinical trial about presence of pathogenic micro-flora and risk of peri-implantitis: Comparison of two different types of implant-abutment connections

Author(s): Mencio F.; De Angelis F.; Papi P.; Rosella D.; Pompa G.; Di Carlo S.

**Source:** European Review for Medical and Pharmacological Sciences; 2017; vol. 21 (no. 7); p. 1443-1451

#### Publication Type(s): Article

Available in full text at European review for medical and pharmacological sciences [Eur Rev Med Pharmacol Sci] NLMUID: 9717360 - from EBSCOhost

**Abstract:**OBJECTIVE: The aim of this in vivo study was to evaluate two different types of implantabutment connections: screwed connection and cemented connection, analyzing peri-implant bacteria micro-flora as well as other clinical parameters. **[ABSTRACT EDITED]** 

#### Interleukin-1beta and interleukin-6 in peri-implant crevicular fluid and relationship with periimplantitis

Author(s): Badea F.C.; Caraiane A.; Balaban D.-P.; Grigorian M.; Bordeianu I.

Source: Archives of the Balkan Medical Union; 2017; vol. 52 (no. 1); p. 15-21

#### Publication Type(s): Article

**Abstract**:Introduction. The aim of this study was to make a quantitative assessment of interleukin-1beta and interleukin-6 in crevicular peri-implant fluid from patients with favorable evolution and patients with peri-implantitis, and to find out if there is a correlation between interleukin-1beta and interleukin-6 values and the patient's clinical status at 7, 30 and 90 days after the insertion of dental implants. **[ABSTRACT EDITED]** 

#### The study of association between beta-3 defensins and bacteria species in peri-implantitis

Author(s): Al Jaboobi A.; Caraiane A.; Balaban D.-P.; Grigorian M.; Badea V.

Source: Archives of the Balkan Medical Union; 2017; vol. 52 (no. 1); p. 22-27

#### Publication Type(s): Article

**Abstract**:Introduction. Peri-implantitis is defined as an inflammatory process initiated by Gramnegative anaerobic bacterial species that colonize the dental implant. Human beta-3 defensin is a small cationic peptide with important antibacterial effects. The aim of the study was to analyze the possible relationship between beta-3 defensin and Gram-negative anaerobic bacilli present in periimplant liquid in patients with favorable evolution of the dental implant and in patients who have developed peri-implantitis. **[ABSTRACT EDITED]** 

### 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:** International Journal of Periodontics & Restorative Dentistry; Jul 2017; vol. 37 (no. 4); p. 481-489

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

**Abstract:**The article presents a radiographic study on the dimensions and morphology of periimplant bone defects using cone beam computer tomography (CBCT) scans. It discusses how CBCT for treatment planning in peri-implantitis should be used after initial clinical examination and twodimensional imaging. Particular attention is given to findings on bone loss in the area around the implant and how that informed explant decisions.

#### Human Histologic Evidence of Reosseointegration Around an Implant Affected with Periimplantitis Following Decontamination with Sterile Saline and Antiseptics: A Case History Report.

**Author(s):** Fletcher, Paul; Deluiz, Daniel; Tinoco, Eduardo M. B.; Ricci, John L.; Tarnow, Dennis P.; Tinoco, Justine Monnerat

**Source:** International Journal of Periodontics & Restorative Dentistry; Jul 2017; vol. 37 (no. 4); p. 499-508

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

**Abstract:**The article presents a case report on human histologic evidence of reosseointegration using a plastic curette for mechanical debridgement and chemical detoxification. Particular attention is given to the use of dilute sodium hypochlorite, hydrogen peroxide, and sterile saline for the detox process. The article also describes guided bone regeneration using calcium sulfate.

#### Prevalences of peri-implantitis and peri-implant mucositis: systematic review and meta-analysis.

Author(s): Lee, Chun-Teh; Huang, Yen-Wen; Zhu, Liang; Weltman, Robin

Source: Journal of dentistry; Jul 2017; vol. 62; p. 1-12

Publication Type(s): Journal Article Review

#### PubMedID: 28478213

**Abstract:**OBJECTIVESDue to the inconsistent definitions, reporting methods and study characteristics, prevalences of peri-implant diseases significantly varied in studies. This study aimed to systematically analyze implant-based and subject-based prevalences of peri-implant diseases and assess clinical variables potentially affecting the prevalence **[ABSTRACT EDITED]** 

### Laser-activated transforming growth factor- $\beta$ 1 induces human $\beta$ -defensin 2: implications for laser therapies for periodontitis and peri-implantitis.

Author(s): Tang, E.; Khan, I.; Andreana, S.; Arany, P. R.

Source: Journal of Periodontal Research; Jun 2017; vol. 52 (no. 3); p. 360-367

### Publication Type(s): Academic Journal

**Abstract:**Background There is increasing popularity of high-power lasers for surgical debridement and antimicrobial therapy in the management of peri-implantitis and periodontal therapy. Removal of the noxious foci would naturally promote tissue healing directly. However, there are also anecdotal reports of better healing around routine high-power laser procedures. The precise mechanisms mediating these effects remain to be fully elucidated. This work examines these lowdose laser bystander effects on oral human epithelial and fibroblasts, particularly focusing on the role of human  $\beta$ -defensin 2 (HBD-2 or DEFB4A), a potent factor capable of antimicrobial effects and promoting wound healing. **[ABSTRACT EDITED]** 

### Microbiome and Microbial Biofilm Profiles of Peri-Implantitis: A Systematic Review.

Author(s): Lafaurie, Gloria Inés; Sabogal, María Alejandra; Castillo, Diana Marcela; Rincón, María Victoria; Gómez, Luz Amparo; Lesmes, Yamil Augusto; Chambrone, Leandro

Source: Journal of periodontology; Jun 2017 ; p. 1-26

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

**Abstract**:BACKGROUNDThis systematic review assesses the microbiological profiles of periimplantitis, periodontitis and healthy implants based on studies that evaluated microbial biofilms and entire microbiomes to establish their similarities and differences. **[ABSTRACT EDITED]** 

### Surgical treatment of peri-implantitis intrabony lesions by means of deproteinized bovine bone mineral with 10% collagen: 7-year-results.

Author(s): Roccuzzo, Mario; Pittoni, Dario; Roccuzzo, Andrea; Charrier, Lorena; Dalmasso, Paola

Source: Clinical oral implants research; Jun 2017

Publication Date: Jun 2017

Publication Type(s): Journal Article

PubMedID: 28626970

**Abstract**:OBJECTIVESThe aim of this study was to evaluate the long-term results of the surgical treatment of single peri-implantitis intrabony defects, by means of deproteinized bovine bone mineral with 10% collagen (DBBMC). **[ABSTRACT EDITED]** 

#### A retrospective study on 1592 consecutively performed operations in one private referral clinic. Part II: Peri-implantitis and implant failures.

Author(s): Jemt, Torsten; Karouni, Michel; Abitbol, Jérémy; Zouiten, Ons; Antoun, Hadi

Source: Clinical implant dentistry and related research; Jun 2017; vol. 19 (no. 3); p. 413-422

Publication Type(s): Journal Article

PubMedID: 28251808

**Abstract**:BACKGROUNDFew large-scale follow-up studies are reported on routine implant treatment.PURPOSETo report retrospective data on peri-implantitis and overall implant failures at one private referral clinic (effectiveness study). **[ABSTRACT EDITED]** 

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

### Panoramic radiographic features that predict the development of bisphosphonate-related osteonecrosis of the jaw

Author(s): Kubo R.; Ariji Y.; Nozawa M.; Ariji E.; Taniguchi T.; Katsumata A.

Source: Oral Radiology; Jun 2017 ; p. 1-10

Publication Type(s): Article In Press

**Abstract**:Objectives: The purpose of this study was to clarify which panoramic radiographic features can predict the development of bisphosphonate-related osteonecrosis of the jaw (BRONJ). **[ABSTRACT EDITED]** 

### Osteoclast profile of medication-related osteonecrosis of the jaw secondary to bisphosphonate therapy: A comparison with osteoradionecrosis and osteomyelitis

Author(s): Weber M.; Preidl R.; Wehrhan F.; Amann K.; Gross C.; Creutzburg K.; Mobius P.

Source: Journal of Translational Medicine; Jun 2017; vol. 15 (no. 1)

Publication Type(s): Article

Available in full text at Journal of Translational Medicine - from BioMed Central

**Abstract**:Background: The medication-related osteonecrosis of the jaw secondary to bisphosphonate therapy [MRONJ (BP)] is characterized by non-healing exposed bone in the maxillofacial region. The pathogenesis of MRONJ (BP) is not fully understood. Giant, hypernucleated, inactive osteoclasts were found in MRONJ (BP) tissues, which indicated that accelerated cell-cell fusion might play a role. Dendritic cell-specific transmembrane protein (DC-STAMP) is associated with the cell-cell fusion of osteoclasts and precursor cells. Tartrate-resistant acid phosphatase (TRAP) is essential for osteoclastic bone resorption. The cell-cell fusion, as part of the osteoclastogenesis, and the resorptive activity can determine the morphology of osteoclasts. This study analyzed jaw bone from patients with MRONJ (BP), osteomyelitis (OM) and osteoradionecrosis (ORN) because a comparison with the osteoclast profiles of OM and ORN is essential for characterizing the osteoclast profile of MRONJ (BP). **[ABSTRACT EDITED]** 

### Bisphosphonate-associated osteonecrosis of the jaw (BONJ) in metastatic breast cancer patients in greater glasgow and clyde

Author(s): Tan Y.; Barrett S.

Source: Clinical Oncology; Jun 2017; vol. 29 (no. 6)

Publication Type(s): Conference Abstract

**Abstract:**Purpose: Osteonecrosis of the jaw (ONJ) is an uncommon complication of bisphosphonate treatment for bone metastases, with dental extractions being a precipitating factor [1]. The incidence of bisphosphonate-associated osteonecrosis of the jaw (BONJ) in metastatic breast cancer patients is estimated at 2.5-3.1% in the literature [1,2], with higher rates quoted in populations of lower socio-economic status [3]. This audit served to study the incidence of BONJ in Greater Glasgow & Clyde (GGC), the management of bisphosphonate treatment post-diagnosis of BONJ as there is currently no consensus of practice, and documentation of dental assessment prior to bisphosphonate initiation [ABSTRACT EDITED]

#### Microcracks in the pathogenesis of bisphosphonate-related osteonecrosis of the jaw

Author(s): Kim S.; Alfafara A.M.; Kim J.-W.; Kim S.-J.

Source: Calcified Tissue International; May 2017; vol. 100 (no. 1)

Publication Type(s): Conference Abstract

**Abstract**:Objectives: The purpose of this study was to investigate the possible role of microcracks in the development of bisphosphonaterelated osteonecrosis of the jaw(BRONJ) through an analysis of microcracks in a bisphosphonate-induced animal model utilizing scanning electron microscopy.

### Dental-related cleft lip and palate

Oral health considerations in a patient with oligosymptomatic ectrodactyly-ectodermal dysplasiacleft syndrome.

Author(s): Sharma, Gaurav; Nagpal, Archna

Source: General dentistry; 2017; vol. 65 (no. 2); p. 66-69

Publication Type(s): Journal Article

**Abstract:**Ectrodactyly-ectodermal dysplasia-cleft (EEC) syndrome-a complex, pleiotropic disorder resulting in multiple congenital anomalies-has an unpredictable clinical expression and is typically

manifested as an autosomal-dominant trait. This article presents a rare case of oligosymptomatic EEC syndrome in a 19-year-old man who exhibited atypical dental findings but no cleft lip or palate. This article is intended to create awareness about this rare syndrome and highlight the role of oral healthcare specialists in improving the quality of life for patients with EEC.

### Factors Responsible for Unfavorable Dental Arch Relationship in non Syndromic Unilateral Cleft Lip and Palate Children.

Author(s): Haque, Sanjida; Alam, Mohammad Khursheed; Khamis, Mohd Fadhli

Source: The Journal of clinical pediatric dentistry; 2017; vol. 41 (no. 3); p. 236-242

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

**Abstract:**OBJECTIVESMultiple factors are whispered to be crucial cause of unfavourable dental arch relationship in cleft lip and palate (CLP). This study aims to evaluate the dental arch relationship of Bangladeshi children with non syndromic unilateral cleft lip and palate (UCLP) following cheiloplasty and palatoplasty. Also to explore the various congenital (UCLP type, UCLP side, family history of cleft, family history of class III) and environmental (cheiloplasty, palatoplasty) factors that affects dental arch relationship of UCLP patients. **[ABSTRACT EDITED]** 

#### Multidisciplinary management of a patient with van der Woude syndrome: A case report.

Author(s): Tehranchi, Azita; Behnia, Hossein; Nadjmi, Nasser; Yassaee, Vahid Reza; Ravesh, Zeinab; Mina, Morteza

Source: International journal of surgery case reports; 2017; vol. 30 ; p. 142-147

### Publication Type(s): Journal Article

**Abstract:**INTRODUCTIONVan der Woude syndrome (VWS) is the most frequent form of syndromic cleft lip and palate (SCLP) accounting for 2% of all patients with CLP.CASE PRESENTATIONWe describe the orthodontic treatment of a girl diagnosed with VWS referred by her family dentist for her cosmetic concerns.DISCUSSIONComprehensive orthodontic treatment, secondary bone graft, distraction osteogenesis (for a deficient maxilla), secondary palatoplasty and excision of lower lip pits, as well as orthodontic and prosthetic procedures may provide a satisfactory outcome. Genetic testing showed a known putative splice site mutation (c.174+1G/A) as the prime cause of VWS in our patient and her family.CONCLUSIONSCLP has significant effects on facial aesthetics and the psychosocial status. Parents should be assessed and counseled appropriately. This condition is treatable in the absence of life threatening systemic anomalies. An interdisciplinary team approach is advocated.

### Facial profile and maxillary arch dimensions in unilateral cleft lip and palate children in the mixed dentition stage.

Author(s): Gopinath, Vellore Kannan; Samsudin, Ab Rani; Noor, Siti Noor Fazliah Mohd; Sharab, Hady Youssef Mohamed

Source: European journal of dentistry; 2017; vol. 11 (no. 1); p. 76-82

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

Available in full text at European Journal of Dentistry - from National Library of Medicine

**Abstract:**OBJECTIVESThe aim of this study was to evaluate the vertical and sagittal facial profile and maxillary arch width, depth, and length of patients with unilateral cleft lip and palate (UCLP) and to

compare them with healthy noncleft children in the mixed dentition stage (7-13 years). **[ABSTRACT EDITED]** 

#### Presurgical cleft lip and palate orthopedics: an overview.

Author(s): Alzain, Ibtesam; Batwa, Waeil; Cash, Alex; Murshid, Zuhair A

Source: Clinical, cosmetic and investigational dentistry; 2017; vol. 9; p. 53-59

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

**Abstract:**Patients with cleft lip and/or palate go through a lifelong journey of multidisciplinary care, starting from before birth and extending until adulthood. Presurgical orthopedic (PSO) treatment is one of the earliest stages of this care plan. In this paper we provide a review of the PSO treatment. This review should help general and specialist dentists to better understand the cleft patient care path and to be able to answer patient queries more efficiently. The objectives of this paper were to review the basic principles of PSO treatment, the various types of techniques used in this therapy, and the protocol followed, and to critically evaluate the advantages and disadvantages of some of these techniques. In conclusion, we believe that PSO treatment, specifically nasoalveolar molding, does help to approximate the segments of the cleft maxilla and does reduce the intersegment space in readiness for the surgical closure of cleft sites. However, what we remain unable to prove equivocally at this point is whether the reduction in the dimensions of the cleft presurgically and the manipulation of the nasal complex benefit our patients in the long term.

### 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.; Rau A.; Hilmer B.; Wolff K.-D.; Loeffelbein D.J.

Source: Clinical Anatomy; 2017

Publication Type(s): Article In Press

**Abstract:**Introduction:: 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.

### **Periodontal disease and antibiotics**

### Efficiency of Nanotube Surface-Treated Dental Implants Loaded with Doxycycline on Growth Reduction of Porphyromonas gingivalis.

Author(s): Ferreira, Cimara Fortes; Babu, Jegdish; Hamlekhan, Azhang; Patel, Sweetu; Shokuhfar, Tolou

Source: The International journal of oral & maxillofacial implants; ; vol. 32 (no. 2); p. 322-328

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

**Abstract:**PURPOSEThe prevalence of peri-implant infection in patients with dental implants has been shown to range from 28% to 56%. A nanotube-modified implant surface can deliver antibiotics locally and suppress periodontal pathogenic bacterial growth. The aim of this study was to evaluate the deliverability of antibiotics via a nanotube-modified implant. **[ABSTRACT EDITED]** 

### Evaluation of antibacterial activity of essential oil of Cinnamomum zeylanicum, Eugenia caryophyllata, and Rosmarinus officinalis against Streptococcus oralis

Author(s): Hsaine S.; Ounine K.; Charof R.

Source: Asian Journal of Pharmaceutical and Clinical Research; 2017; vol. 10 (no. 5); p. 410-412

Publication Type(s): Article

**Abstract:**Objective: Streptococcus oralis plays an important role in the biofilm formation of dental plaque and the occurrence of periodontal disease. The present study was conducted to evaluate in vitro antibacterial activity of three essential oils, namely, Cinnamomum zeylanicum, Eugenia caryophyllata, and Rosmarinus officinalis against S. oralis. **[ABSTRACT EDITED]** 

#### Case of a cerebral abscess caused by Porphyromonas gingivalis in a subject with periodontitis

Author(s): Van Der Cruyssen F.; Grisar K.; Maes H.; Politis C.

Source: BMJ Case Reports; 2017; vol. 2017

#### Publication Type(s): Article

**Abstract:**We report the case of a 65-year-old man presenting with generalised seizures after developing a right frontal brain abscess. Stereotactic aspiration and subsequent matrix assisted laser desorption/ionisation time-of-flight analyzer (MALDI-TOF) spectrometry revealed Porphyromonas gingivalis as the only causative anaerobe microorganism. Secondary incision and drainage was required due to neurological deterioration with increased dimensions of the abscess, intracranial pressure and formation of a subdural occipitoparietal empyema. Oral imaging was positive for apical periodontitis of multiple elements; therefore, the remaining dentition was removed. Targeted antibiotic treatment included intravenous ceftriaxone and ornidazole. The patient was discharged to our revalidation unit 59 days after admission to make a full recovery. To the best of our knowledge, this is the sixth reported case of P. gingivalis causing an intracranial abscess and the third case of a true intracerebral parenchymal abscess caused by this bacterium.Copyright © 2017 BMJ Publishing Group Ltd.

### Antibacterial effectiveness of selected moroccan essential oils against the highly virulent JP2 clone of aggregatibacter actinomycetemcomitans

Author(s): Lakhdar L.; Farah A.; Lahlou I.; Rida S.; Bouziane A.; Ennibi O.

Source: International Journal of Pharmacy and Pharmaceutical Sciences; 2017; vol. 9 (no. 2); p. 47-51

### Publication Type(s): Article

**Abstract:**Objective: Aggregatibacter actinomycetemcomitans (Aa) serotype b JP2 clone is a highly virulent strain, considered as a major etiologic agent in aggressive periodontitis in patients of African descent, such as Moroccan adolescents. Antibiotics have been and continue to be the only effective treatment of periodontal infections caused by this periodontal bacterium. However, today there is enough scientific evidence on the existence of an increased resistance of oral bacteria to antibiotics. Therefore, the search for new natural agents, that are safe and effective, such "essential oils," has become a necessity. The present study was conducted to evaluate the in vitro antibacterial activities of three selected essential oils from Moroccan aromatic medicinal plants (Origanum compactum, Thymus vulgaris and Cymbopogon martinii) against clinical Moroccan isolate of Aa JP2 strain. Methods: Antibacterial activity of essential oils was investigated using agar well diffusion method, then measured using broth microdilution method. Results: All the selected essential oils exhibited significant antibacterial activity on the highly pathogenic JP2 strain of Aa. Essential oil of Origanum compactum was found to be the most effective with a minimum inhibitory concentration (MIC)

value of 0.03% (v/v) and a minimum bactericidal concentration value (MBC) of 0.07%. Conclusion: The present findings indicate the possibility of exploiting these essential oils as potential antimicrobial agents in treatment of aggressive periodontitis associated to this pathogen.Copyright © 2016 The Authors.

#### Amoxicillin-loaded electrospun nanocomposite membranes for dental applications

Author(s): Furtos G.; Rivero G.; Abraham G.A.; Rapuntean S.

**Source:** Journal of Biomedical Materials Research - Part B Applied Biomaterials; Jul 2017; vol. 105 (no. 5); p. 966-976

#### Publication Type(s): Article

Abstract: Electrospun nanocomposite matrices based on poly(epsilon-caprolactone) (PCL), nanohydroxyapatite (nHAp) and amoxicillin (AMX) were designed and investigated for dental applications. nHAp provides good biocompatibility, bioactivity, osteoconductivity, and osteoinductivity properties, and AMX, as antibiotic model, controls and/or reduces bacterial contamination of periodontal defects while enhancing tissue regeneration. A series of polymeric nanocomposites was obtained by varying both the antibiotic and nHAp contents. Fibrous membranes of different compositions were obtained by electrospinning technique, and morphological, thermal, mechanical and surface properties were characterized. The incorporation of AMX seemed to alter the nHAp distribution within the microfibrous matrix. The interaction between AMX and nHAp affected the mechanical performance and modulated the antibiotic release behavior. AMX release profiles presented a burst release that depended on nHAp content, followed by a slow release stage where the drug content (85-100%) was released in 3 weeks. The antimicrobial activity of the AMX-loaded membranes was tested with four bacterial strains depended on both the drug and nHAp contents. Extensive mineralization in simulated body fluid (SBF) was evidenced by SEM/EDX analysis after 21 days. The studied electrospun nanocomposite amoxicillin-loaded membranes could be a promising fibrous-based antibiotic carrier system for dental and tissue engineering applications. © 2016 Wiley Periodicals, Inc. J Biomed Mater Res Part B: Appl Biomater, 105B: 966-976, 2017.Copyright © 2016 Wiley Periodicals, Inc.

### High-throughput sequencing analyses of oral microbial diversity in healthy people and patients with dental caries and periodontal disease

Author(s): Chen T.; Wang X.; Meng F.; Yang S.; Xin H.; Shi Y.; Yang J.

Source: Molecular Medicine Reports; Jul 2017; vol. 16 (no. 1); p. 127-132

#### Publication Type(s): Article

**Abstract:**Recurrence of oral diseases caused by antibiotics has brought about an urgent requirement to explore the oral microbial diversity in the human oral cavity. In the present study, the high-throughput sequencing method was adopted to compare the microbial diversity of healthy people and oral patients and sequence analysis was performed by UPARSE software package. The Venn results indicated that a mean of 315 operational taxonomic units (OTUs) was obtained, and 73, 64, 53, 19 and 18 common OTUs belonging to Firmicutes, Bacteroidetes, Proteobacteria, Actinobacteria and Fusobacteria, respectively, were identified in healthy people. Moreover, the reduction of Firmicutes and the increase of Proteobacteria in the children group, and the increase of Firmicutes and the reduction of Proteobacteria in the youth and adult groups, indicated that the age bracket and oral disease had largely influenced the tooth development and microbial development in the oral cavity. In addition, the traditional 'pathogenic bacteria' of Firmicutes, Proteobacteria and Bacteroidetes (accounted for >95% of the total sequencing number in each group) indicated that the 'harmful' bacteria may exert beneficial effects on oral health. Therefore, the data will provide certain

clues for curing some oral diseases by the strategy of adjusting the disturbed microbial compositions in oral disease to healthy level.

### Prevalence and treatment of necrotizing ulcerative gingivitis (NUG) in the British Armed Forces: a case-control study.

Author(s): Dufty, J; Gkranias, N; Petrie, A; McCormick, R; Elmer, T; Donos, N

Source: Clinical oral investigations; Jul 2017; vol. 21 (no. 6); p. 1935-1944

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

**Abstract:**OBJECTIVESNecrotizing ulcerative gingivitis (NUG) has been seen in military populations throughout history. This study aims to determine the prevalence, treatment modality and risk factors associated with NUG in the British Armed Forces. **[ABSTRACT EDITED]** 

#### Bacteria in the apical root canals of teeth with apical periodontitis

Author(s): Lee L.-W.; Lee Y.-L.; Hsiao S.-H.; Lin H.-P.

Source: Journal of the Formosan Medical Association; Jun 2017; vol. 116 (no. 6); p. 448-456

#### Publication Type(s): Article

**Abstract:**Background/Purpose Bacteria in the tooth root canal may cause apical periodontitis. This study examined the bacterial species present in the apical root canal of teeth with apical periodontitis. Antibiotic sensitivity tests were performed to evaluate whether these identified bacterial species were susceptible to specific kinds of antibiotics. **[ABSTRACT EDITED]** 

### Antimicrobial activity of aqueous extracts from four plants on bacterial isolates from periodontitis patients

**Author(s):** Arbia L.; Chikhi-Chorfi N.; Zenia S.; Mameri N.; Lounici H.; Betatache I.; Pham-Huy C.; Drouiche N.

**Source:** Environmental science and pollution research international; May 2017; vol. 24 (no. 15); p. 13394-13404

#### Publication Type(s): Article

**Abstract:**Four aqueous extracts of different plant organs are the following: Artemisia herba-alba, Opuntia ficus-indica, Camellia sinensis and Phlomis crinita were evaluated against two bacterial strains: Porphyromonas gingivalis and Prevotella intermedia, which are implicated in periodontal diseases. By using a disc method, these plant extracts demonstrated powerful bacterial activity against these Gram-negative strains. The minimum inhibitory concentration values of the four plant extracts varied between 0.03 and 590.82 mg/ml for the microbes. Another assay using commercial antibiotics and antibacterials as positive controls was also conducted. Values obtained after statistical analysis of inhibition diameters of all plant extracts demonstrated that for P. gingivalis, the aqueous extracts of A. herba-alba and O. ficus-indica were most effective, followed by those of C. sinensis and P. crinita. For P. intermedia, aqueous extracts of O. ficus-indica and C. sinensis appeared to be more efficient with significantly different (P > 0.05) inhibition diameters, followed by those of O. ficus-indica and P. crinita. In summary, the statistical results reveal that these plant extracts exert stronger antibacterial activity on P. intermedia germ as compared to P. gingivalis.

#### Defining genetic fitness determinants and creating genomic resources for an oral pathogen.

Author(s): Narayanan, Ajay M; Ramsey, Matthew M; Stacy, Apollo; Whiteley, Marvin Source: Applied and environmental microbiology; May 2017

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

Available in full text at Applied and Environmental Microbiology - from National Library of Medicine

**Abstract:**Periodontitis is a microbial infection that destroys the structures that support the teeth. Although typically a chronic condition, rapidly progressing, aggressive forms are associated with the oral pathogen Aggregatibacter actinomycetemcomitans One of this bacterium's key virulence traits is its ability to attach to surfaces and form robust biofilms that resist killing by the host and antibiotics. **[ABSTRACT EDITED]** 

### Inhibition of the MurA enzyme in Fusobacterium nucleatum by potential inhibitors identified through computational and in vitro approaches.

Author(s): Kumar, Amit; Saranathan, Rajagopalan; Prashanth, K; Tiwary, Basant K; Krishna, Ramadas

Source: Molecular bioSystems; May 2017; vol. 13 (no. 5); p. 939-954

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

**Abstract:**Fusobacterium nucleatum plays a key role in several diseases such as periodontitis, gingivitis, appendicitis, and inflammatory bowel disease (IBD). The development of antibiotic resistance by this bacterium demands novel therapeutic intervention. Our recent study has reported UDP-N-acetylglucosamine 1-carboxyvinyltransferase (MurA) as one of the potential target proteins in F. nucleatum. In this study, we proposed two novel MurA inhibitors through in silico screening and evaluated their mode of inhibition by in vitro experiments. It was found that MurA structural arrangement (inside-out  $\alpha/\beta$  barrel) was stabilized by L/FXXXG(A) motif-based interactions. **[ABSTRACT EDITED]** 

#### Quality indicators for the use of systemic antibiotics in dentistry.

Author(s): Hussein, Rugzan Jameel; Krohn, Robert; Kaufmann-Kolle, Petra; Willms, Gerald
Source: Zeitschrift fur Evidenz, Fortbildung und Qualitat im Gesundheitswesen; May 2017; vol. 122;
p. 1-8

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

**Abstract:**BACKGROUNDRisks resulted from using systemic antibiotics such as increasing rates of bacterial resistance, allergy and side effects should be always weighed individually for each patient against any potential benefits. Routine antibiotic prescribing must be therefore discouraged. The Federal Joint Committee ("Gemeinsamer Bundesauschuss", G-BA) commissioned the AQUA-Institute with the development of an external quality assurance procedure, examining systemic antibiotic use in periodontal, conservative and surgical treatments in ambulatory dental health care. The aim of the procedure was to increase patient safety through rational use of systemic antibiotics and increasing the use of first line medications. **[ABSTRACT EDITED]** 

#### A review of the literature: antibiotic usage and its relevance to the infection in periodontal flaps.

Author(s): Liu, Yiying; Duan, Dingyu; Xin, Yuejiao; Bai, Lin; Li, Tianyu; Li, Chuwen; Xu, Yi

Source: Acta odontologica Scandinavica; May 2017; vol. 75 (no. 4); p. 288-293

Publication Type(s): Journal Article

**Abstract:**OBJECTIVEThis study aimed to investigate the systemic antibiotic usage in the perioperative period of periodontal flaps and its relevance to the infection after surgeries through reviewing the papers of the last decade. . **[ABSTRACT EDITED]** 

### Dental-related head and neck oncology

### Conference report on the Indo Global Summit on Head and Neck Oncology (IGSHNO 2017-BMCON-IV), 24-26 February 2017, Jaipur, India.

Author(s): Soni, Tej Prakash; Gupta, Anil K; Sharma, Lalit M; Singhal, Pawan; Yadav, Dinesh; Bansal, Umesh

Source: Ecancermedicalscience; 2017; vol. 11; p. 739

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

**Abstract:** 'The multidisciplinary approach: expanding treatment horizons for head and neck cancer' was the major theme of the Indo Global Summit on Head and Neck Oncology (IGSHNO 2017-BMCON-IV). The meeting, held in Jaipur (Rajasthan, India) from 24 to 26 February 2017, assembled 600 participants from India and worldwide. It was organised by the Bhagwan Mahaveer Cancer Hospital and Research Centre (BMCHRC), Jaipur. [**ABSTRACT EDITED**]

### Head and neck cancer (HNC) patients beyond 2 years of disease control: Preliminary analysis of ilea (intensity modulated radiotherapy late effect assessment) scale

Author(s): Basu T.

Source: Supportive Care in Cancer; 2017; vol. 25 (no. 2)

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

**Abstract:**Introduction Intensity modulated radiotherapy (IMRT) has been instrumental in the head and neck cancer (HNC) management owing to its clinical and safe toxicity profile. Patient's controlled on their disease for more than 2 years has several unmet concerns. Objectives This study aims at assessing these concerns through an indigenous ILEA scale combining quality of life and organs at risk (OAR) specific late toxicities together. **[ABSTRACT EDITED]** 

### Prospective cohort study of oral health promotion program for head and neck cancer patients receiving radiotherapy

Author(s): Wu H.G.; Kim E.; Kim J.H.; Han D.H.; Lee H.J.

Source: Supportive Care in Cancer; 2017; vol. 25 (no. 2)

Publication Type(s): Conference Abstract

**Abstract:**Introduction Many patients who receiving radiotherapy (RT) for head and neck cancer (HNC) suffer from oral complications. But there is no standard program to prevent to RT-induced oral complications. Objectives To develop oral health promotion program and evaluate its effectiveness in HNC patients receiving RT. **[ABSTRACT EDITED]** 

### The relationships between oral intake and days to discharge after treatment in patients with head and neck cancer undergoing chemoradiotherapy

Author(s): Sakamoto H.; Fujita M.; Matsuo K.; Okamoto M.; Taniguchi H.; Nakagawa K.

Source: Supportive Care in Cancer; 2017; vol. 25 (no. 2)

Publication Type(s): Conference Abstract

**Abstract:**Introduction Nutrition and food oral intake are important factors in mortality and quality of life of patients with head and neck cancer receiving chemoradiotherapy. Objectives The aim of this study was to examine the relationships total and oral intake calories during chemoradiotherapy (CRT) and days to discharge after completing the CRT. **[ABSTRACT EDITED]** 

#### Oralcomplicationsafterradiationtherapy for head and neck cancer

Author(s): Lalla R.; Treister N.; Sollecito T.; Schmidt B.; Patton L.; Mohammadi K.; Hodges J.; Brennan M.

Source: Supportive Care in Cancer; 2017; vol. 25 (no. 2)

### Publication Type(s): Conference Abstract

**Abstract:**Introduction Radiation Therapy (RT) for Head and Neck Cancer (HNC) can cause significant oral complications. However, modern techniques such as Intensity Modulated RT (IMRT) may reduce their incidence/severity. Objectives To assess severity of oral complications 6 months after modern RT for HNC. Methods OraRad is an ongoing 6-center prospective cohort study. Oral outcomes are evaluated before start of RT (baseline), and 6, 12, 18, 24 months after RT. For this analysis, we compared baseline vs. 6 month data using mixed linear models for continuous measures and generalized estimating equations for categorical measures. **[ABSTRACT EDITED]** 

#### Pre-radiation dental treatment in the head and neck cancer patient

Author(s): Iturbide A.; Dhaliwal V.; Noll J.; Brennan M.; Hodges J.; Von Bultzingslowen I.

Source: Supportive Care in Cancer; 2017; vol. 25 (no. 2)

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

**Abstract:**Introduction Removal of at-risk teeth is frequently recommended to decrease negative dental outcomes pre-RT for head and neck cancer (HNC), but no current standard of care exists for pre-RT dental treatment. Objectives Assess factors associated with recommended full-mouth extraction (FME) for HNC pre-RT. **[ABSTRACT EDITED]** 

#### Dental disease prior to radiation therapy for head and neck cancer

Author(s): Brennan M.; Sollecito T.; Treister N.; Schmidt B.; Patton L.; Mohammadi K.; Voelker H.; Long-Simpson L.; Hodges J.; Lalla R.

Source: Supportive Care in Cancer; 2017; vol. 25 (no. 2)

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

**Abstract**:Introduction No evidence-based guidelines exist for preventive dental care before radiation therapy (RT) in head and neck cancer (HNC) patients. An ongoing multi-center, prospective cohort study, Clinical Registry of Dental Outcomes in HNC patients (OraRad) (1U01DE022939-01), is addressing this knowledge gap. Objectives Evaluate dental disease and associated factors pre-RT. [ABSTRACT EDITED]

#### Gap analysis: A strategy to improve the quality of care of head and neck cancer patients

**Author(s):** Granda-Cameron C.; Pauly M.; DeMille D.; Null S.; Malkowski J.; Mante A.; Hogan T.; Lane J.; Geiger G.A.; Newman J.; Lynch M.P.

Source: Journal of Community and Supportive Oncology; 2017; vol. 15 (no. 1); p. 28-36

### Publication Type(s): Article

**Abstract:**Background Continuing assessment of cancer care delivery is paramount to the delivery of high-quality care. Head and neck cancer patients are vulnerable to flaws in care because of the complexity of medical and psychosocial conditions. Objective To describe the use of a gap analysis and quality improvement interventions to maximize the coordination and care for patients with head and neck cancer. **[ABSTRACT EDITED]** 

### Contouring and dose calculation in head and neck cancer radiotherapy after reduction of metal artifacts in CT images.

**Author(s):** Christiansen, Rasmus Lübeck; Lorenzen, Ebbe Laugaard; Bertelsen, Anders Smedegaard; Hansen, Christian Rønn; Brink, Carsten; Eriksen, Jesper Grau; Asmussen, Jon Thor; Gyldenkerne, Niels; Johansen, Jørgen

Source: Acta Oncologica; Jun 2017; vol. 56 (no. 6); p. 874-878

Publication Type(s): Academic Journal

**Abstract:**Background:Delineation accuracy of the gross tumor volume (GTV) in radiotherapy planning for head and neck (H&N) cancer is affected by computed tomography (CT) artifacts from metal implants which obscure identification of tumor as well as organs at risk (OAR). This study investigates the impact of metal artifact reduction (MAR) in H&N patients in terms of delineation consistency and dose calculation precision in radiation treatment planning. **[ABSTRACT EDITED]** 

### Compliance of post-radiation therapy head and neck cancer patients with caries preventive protocols.

Author(s): Frydrych, A M; Slack-Smith, L M; Parsons, R

Source: Australian dental journal; Jun 2017; vol. 62 (no. 2); p. 192-199

Publication Type(s): Journal Article

**Abstract:**BACKGROUNDCaries prevention is paramount in safeguarding the life quality of head and neck cancer patients and is dependent on patient compliance with caries preventive protocols. The purpose of this study was to examine this compliance. . **[ABSTRACT EDITED]** 

### Investigation of nutritional status using the Mini Nutritional Assessment-Short Form and analysis of the relevant factors in patients with head and neck tumour.

Author(s): Yanagi, Ayaka; Murase, Mai; Sumita, Yuka I; Taniguchi, Hisashi

Source: Gerodontology; Jun 2017; vol. 34 (no. 2); p. 227-231

Publication Type(s): Journal Article

**Abstract:**OBJECTIVEThe aims of this study were to reveal the nutritional status of patients after head and neck tumour treatment by using the Mini Nutritional Assessment-Short Form (MNA-SF) and to analyse the factors affecting nutritional status in patients with head and neck

tumour.BACKGROUNDElderly patients with loss of teeth and maxillary/mandibular bone due to head and neck tumour treatment could be at high risk of malnutrition. However, there are few reports on the nutritional status of these patients. . **[ABSTRACT EDITED]** 

### Head and Neck Cancer Survivorship Care Guideline: American Society of Clinical Oncology Clinical Practice Guideline Endorsement of the American Cancer Society Guideline.

**Author(s):** Nekhlyudov, Larissa; Lacchetti, Christina; Davis, Nancy B.; Garvey, Thomas Q.; Goldstein, David P.; Nunnink, J. Chris; Ruades Ninfea, Jose I.; Salner, Andrew L.; Salz, Talya; Siu, Lillian L.; Ninfea, Jose I Ruades

Source: Journal of Clinical Oncology; May 2017; vol. 35 (no. 14); p. 1606-1623

### Publication Type(s): Academic Journal

Available in full text at Journal of clinical oncology: official journal of the American Society of Clinical Oncology [J Clin Oncol] NLMUID: 8309333 - from EBSCOhost

Available in full text at Journal of Clinical Oncology - from American Society of Clinical Oncology

**Abstract:**Purpose This guideline provides recommendations on the management of adults after head and neck cancer (HNC) treatment, focusing on surveillance and screening for recurrence or second primary cancers, assessment and management of long-term and late effects, health promotion, care coordination, and practice implications. **[ABSTRACT EDITED]** 

### The role of dentistry other than oral care in patients undergoing radiotherapy for head and neck cancer.

**Author(s):** Matsuzaki, Hidenobu; Tanaka-Matsuzaki, Kumiko; Miyazaki, Fuminobu; Aoyama, Hideki; Ihara, Hiroki; Katayama, Norihisa; Katsui, Kuniaki; Himei, Kengo; Takeuchi, Tetsuo; Onoda, Tomoo; Kimata, Yoshihiro; Asaumi, Jun-Ichi

Source: The Japanese dental science review; May 2017; vol. 53 (no. 2); p. 46-52

Publication Type(s): Journal Article Review

**Abstract:**The usefulness of dental approaches, such as oral management, has gained recognition among patients treated for head and neck cancer. In particular, oral management plays a very important role before, during, and after treatment in patients undergoing radiotherapy, chemotherapy, or a combination of both. However, specialized dentistry knowledge and techniques that are useful for patients undergoing radiotherapy for head and neck cancer have yet to be reported. Therefore, in this review article, our aim is to introduce dental approaches in radiotherapy for patients with head and neck cancer that have been developed and are currently being used at our institute.

### The impact of oral rehabilitation on oral health-related quality of life in patients receiving radiotherapy for the treatment of head and neck cancer.

Author(s): Schweyen, Ramona; Kuhnt, Thomas; Wienke, Andreas; Eckert, Alexander; Hey, Jeremias

Source: Clinical oral investigations; May 2017; vol. 21 (no. 4); p. 1123-1130

Publication Type(s): Journal Article

**Abstract:**OBJECTIVESTo analyze the influence of dental treatment on oral health-related quality of life (OHRQoL) in head and neck cancer patients. . **[ABSTRACT EDITED]** 

### Expansion of the peri-implant attached gingiva with a three-dimensional collagen matrix in head and neck cancer patients-results from a prospective clinical and histological study.

**Author(s):** Lorenz, Jonas; Blume, Maximilian; Barbeck, Mike; Teiler, Anna; Kirkpatrick, C James; Sader, Robert A; Ghanaati, Shahram

Source: Clinical oral investigations; May 2017; vol. 21 (no. 4); p. 1103-1111

Publication Type(s): Journal Article

**Abstract:**OBJECTIVESAttached peri-implant gingiva has proven to have an influence on the long-term stability of dental implants. In patients with head and neck cancer, a functional peri-implant gingiva is even more of critical importance. The aim of the presented prospective study was to investigate a three-dimensional xenogeneic collagen matrix for augmentation around dental implants in patients with former head and neck cancer. . **[ABSTRACT EDITED]** 

### **Dental implants**

### Vestibuloplasty with Retroauricular Skin Grafts for Dental Implant Rehabilitation in Vascularized Fibula Grafts: Two Case Reports.

Author(s): Sencimen, Metin; Gulses, Aydin; Varol, Altan; Ayna, Mustafa; Ozen, Jülide;

**Source:** International Journal of Periodontics & Restorative Dentistry; Jul 2017; vol. 37 (no. 4); p. 491-497

Publication Type(s): Academic Journal

**Abstract:**The article presents a study on the use of retroauricular full-thickness skin grafts in vestibuloplasty surgery for dental implant rehabilitation within vascularized fibula grafts. It details patient experiences who underwent mandibular reconstruction with vascularized fibular grafts caused by mandibular gunshot injuries.

### Morphometric Changes Induced by Cold Argon Plasma Treatment on Osteoblasts Grown on Different Dental Implant Surfaces.

Author(s): Canullo, Luigi; Genova, Tullio; Mandracci, Pietro; Mussano, Federico; Abundo, Roberto;

**Source:** International Journal of Periodontics & Restorative Dentistry; Jul 2017; vol. 37 (no. 4); p. 541-548

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

**Abstract:**The article presents an in vitro study to determine the early cell morphology after cold argon plasma (CAP) treatment of different titanium surfaces. It looks at how CAP affected the performance of osteoblasts by evaluating the cell morphology outcome. The study goes on to demonstrate the positive effect of CAP on smooth, moderately rough, and rough implant surfaces.

#### Public and Patient Knowledge About Dental Implants.

Author(s): Deeb, George; Wheeler, Bryan; Jones, Margaret; Carrico, Caroline; Laskin, Daniel; Source: Journal of Oral & Maxillofacial Surgery (02782391); Jul 2017; vol. 75 (no. 7); p. 1387-1391

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

**Abstract:**Purpose: The more informed a patient is about a given procedure, the better the ultimate outcome. This study was designed to compare general public awareness and knowledge regarding oral implant treatment with those of patients presenting for such treatment and to determine the sources from which they may have obtained such information, as well as the accuracy of the information. **[ABSTRACT EDITED]** 

### Degradation mechanisms and future challenges of titanium and its alloys for dental implant applications in oral environment.

Author(s): Revathi, A; Borrás, Alba Dalmau; Muñoz, Anna Igual; Richard, Caroline;

**Source:** Materials science & engineering. C, Materials for biological applications; Jul 2017; vol. 76 ; p. 1354-1368

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

**Abstract:**OBJECTIVEFor many decades the failure of titanium implants due to corrosion and wear were approached individually and their synergic effect was not considered. In recent past,

developments and understanding of the tribocorrosion aspects have thrown deeper understanding on the failure of implants and this has been reviewed in this article extensively. **[ABSTRACT EDITED]** 

### In vitro biological outcome of laser application for modification or processing of titanium dental implants.

Author(s): Hindy, Ahmed; Farahmand, Farzam; Tabatabaei, Fahimeh Sadat Source: Lasers in medical science; Jul 2017; vol. 32 (no. 5); p. 1197-1206

### Publication Type(s): Journal Article

**Abstract:**There are numerous functions for laser in modern implant dentistry including surface treatment, surface coating, and implant manufacturing. As laser application may potentially improve osseointegration of dental implants, we systematically reviewed the literature for in vitro biological responses to laser-modified or processed titanium dental implants. The literature was searched in PubMed, ISI Web, and Scopus, using keywords "titanium dental implants," "laser," "biocompatibility," and their synonyms. After screening the 136 references obtained, 28 articles met the inclusion criteria. We found that Nd:YAG laser was the most commonly used lasers in the treatment or processing of titanium dental implants. Most of the experiments used cell attachment and cell proliferation to investigate bioresponses of the implants. The most commonly used cells in these assays were osteoblast-like cells. Only one study was conducted in stem cells. These in vitro studies reported higher biocompatibility in laser-modified titanium implants. It seems that laser radiation plays a vital role in cell response to dental implants; however, it is necessary to accomplish more studies using different laser types and parameters on various cells to offer a more conclusive result.

#### Modelling dental implant extraction by pullout and torque procedures.

Author(s): Rittel, D; Dorogoy, A; Shemtov-Yona, K

Source: Journal of the mechanical behavior of biomedical materials; Jul 2017; vol. 71; p. 416-427

### Publication Type(s): Journal Article

**Abstract:**Dental implants extraction, achieved either by applying torque or pullout force, is used to estimate the bone-implant interfacial strength. A detailed description of the mechanical and physical aspects of the extraction process in the literature is still missing. This paper presents 3D nonlinear dynamic finite element simulations of a commercial implant extraction process from the mandible bone. Emphasis is put on the typical load-displacement and torque-angle relationships for various types of cortical and trabecular bone strengths. The simulations also study of the influence of the osseointegration level on those relationships. **[ABSTRACT EDITED]** 

### Fracture strength and probability of survival of narrow and extra-narrow dental implants after fatigue testing: In vitro and in silico analysis.

Author(s): Bordin, Dimorvan; Bergamo, Edmara T P; Fardin, Vinicius P; Coelho, Paulo G; Bonfante, Estevam A

Source: Journal of the mechanical behavior of biomedical materials; Jul 2017; vol. 71; p. 244-249

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

**Abstract:**PURPOSETo assess the probability of survival (reliability) and failure modes of narrow implants with different diameters. . **[ABSTRACT EDITED]** 

Basis of bone metabolism around dental implants during osseointegration and peri-implant bone loss.

Author(s): Insua, Angel; Monje, Alberto; Wang, Hom-Lay; Miron, Richard J

Source: Journal of biomedical materials research. Part A; Jul 2017; vol. 105 (no. 7); p. 2075-2089

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

**Abstract:**Despite the growing number of publications in the field of implant dentistry, there are limited studies to date investigating the biology and metabolism of bone healing around dental implants and their implications in peri-implant marginal bone loss. The aim of this review article is to provide a thorough understanding of the biological events taking place during osseointegration and the subsequent early and late phases of bone remodeling around dental implants. **[ABSTRACT EDITED]** 

### Dental pulp stem cells grown on dental implant titanium surfaces: An in vitro evaluation of differentiation and microRNAs expression.

Author(s): Iaculli, Flavia; Di Filippo, Ester Sara; Piattelli, Adriano; Mancinelli, Rosa; Fulle, Stefania

**Source:** Journal of biomedical materials research. Part B, Applied biomaterials; Jul 2017; vol. 105 (no. 5); p. 953-965

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

**Abstract:**The surface roughness of dental implants influences the proliferation and differentiation rate of adult mesenchymal stem cells (MSCs). The aim of the present study was to evaluate whether specifically treated titanium implant surfaces influenced human dental pulp stem cells (DPSCs) differentiation in an osteogenic pattern through modulation of microRNAs expression. . **[ABSTRACT EDITED]** 

### Premature exposure of dental implant cover screws. A retrospective evaluation of risk factors and influence on marginal peri-implant bone level changes.

Author(s): Hertel, Moritz; Roh, Yun-Chie; Neumann, Konrad; Strietzel, Frank Peter

Source: Clinical oral investigations; Jul 2017; vol. 21 (no. 6); p. 2109-2122

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

**Abstract**:OBJECTIVESThe objectives of this study were to identify risk factors associated with the premature cover screw exposure (pCSE) at dental implants and to evaluate the influence of a pCSE on peri-implant marginal bone level (MBL) change compared to non-exposed implants. . **[ABSTRACT EDITED]** 

# A comparative study of the effectiveness of early and delayed loading of short tissue-level dental implants with hydrophilic surfaces placed in the posterior section of the mandible-A preliminary study.

**Author(s):** Makowiecki, Arkadiusz; Botzenhart, Ute; Seeliger, Julia; Heinemann, Friedhelm; Biocev, Peter; Dominiak, Marzena

**Source:** Annals of anatomy = Anatomischer Anzeiger : official organ of the Anatomische Gesellschaft; Jul 2017; vol. 212 ; p. 61-68

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

**Abstract:**The objective of the present study was to compare the primary and secondary stability of tissue-level short dental titanium implants with polished necks and hydrophilic surfaces of two different designs and manufacturers. . **[ABSTRACT EDITED]** 

### Vertical Alveolar Distraction Osteogenesis of the Atrophic Posterior Mandible Before Dental Implant Insertion.

Author(s): Rachmiel, Adi; Shilo, Dekel; Aizenbud, Dror; Emodi, Omri

Source: Journal of Oral & Maxillofacial Surgery (02782391); Jun 2017; vol. 75 (no. 6); p. 1164-1175

Publication Date: Jun 2017

Publication Type(s): Academic Journal

PubMedID: 28208057

**Abstract:**Purpose: Augmentation of deficient mandibular posterior alveolar ridges poses a great challenge because of extensive bone deficiency and the presence of the inferior alveolar nerve. This study sets its focus on vertical alveolar distraction osteogenesis (ADO) at the posterior mandible before dental implant placement. **. [ABSTRACT EDITED]** 

How to treat two adjacent missing teeth with dental implants. A systematic review on single implant-supported two-unit cantilever FDP's and results of a 5-year prospective comparative study in the aesthetic zone.

Author(s): Van Nimwegen, W. G.; Raghoebar, G. M.; Tymstra, N.; Vissink, A.; Meijer, H. J. A.

Source: Journal of Oral Rehabilitation; Jun 2017; vol. 44 (no. 6); p. 461-471

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

**Abstract:**To conduct a systematic review on the clinical outcome of single implant-supported twounit cantilever FDP's and to conduct a 5-year prospective comparative pilot study of patients with a missing central and lateral upper incisor treated with either a single implant-supported two-unit cantilever FDP or two implants with solitary implant crowns in the aesthetic zone. . **[ABSTRACT EDITED]** 

### Cost and lack of insurance coverage are prohibitive to having dental implants after resections for benign mandibular neoplasms.

Author(s): Peacock, Zachary S.; Ji, Yisi D.

**Source:** Oral Surgery, Oral Medicine, Oral Pathology & Oral Radiology; Jun 2017; vol. 123 (no. 6); p. 645-650

Publication Type(s): Academic Journal

PubMedID: 28169143

**Abstract:**Objectives: To assess how often patients receive dental implants after mandibular resection for benign neoplasms and to determine barriers to completion of functional reconstruction. [ABSTRACT EDITED]

### Dental implant treatment for renal failure patients on dialysis: a clinical guideline.

**Author(s):** Yuan, Quan; Xiong, Qiu-Chan; Gupta, Megha; López-Pintor, Rosa María; Chen, Xiao-Lei; Seriwatanachai, Dutmanee; Densmore, Michael; Man, Yi; Gong, Ping

Source: International journal of oral science; Jun 2017

Publication Type(s): Journal Article Review

**Abstract:**Chronic kidney disease (CKD) is a worldwide public health problem that is growing in prevalence and is associated with severe complications. During the progression of the disease, a majority of CKD patients suffer oral complications. Dental implants are currently the most reliable

and successful treatment for missing teeth. However, due to complications of CKD such as infections, bone lesions, bleeding risks, and altered drug metabolism, dental implant treatment for renal failure patients on dialysis is more challenging. In this review, we have summarized the characteristics of CKD and previous publications regarding dental treatments for renal failure patients. In addition, we discuss our recent research results and clinical experience in order to provide dental implant practitioners with a clinical guideline for dental implant treatment for renal failure patients undergoing hemodialysis.International Journal of Oral Science advance online publication, 23 June 2017; doi:10.1038/ijos.2017.23.

### What is the methodological quality of published dental implant guidelines?

#### Author(s): Howe, Mark-Steven

Source: Evidence-based dentistry; Jun 2017; vol. 18 (no. 2); p. 35-36

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

**Abstract:**Data sourcesSix implant dentistry journals with impact factors (2014) assigned by Journal Citation Reports (Clinical Oral Implants Research, Clinical Implant Dentistry and Related Research, European Journal of Oral Implants, The International Journal of Oral and Maxillofacial Implants, Journal of Oral Implantology, and Implant Dentistry) and the Medline database. . [ABSTRACT EDITED]

### Titanium-released from dental implant enhances pre-osteoblast adhesion by ROS modulating crucial intracellular pathways.

Author(s): Rossi, M C; Bezerra, Fjb; Silva, R A; Crulhas, B P; Fernandes, Cjc; Nascimento, A S; Pedrosa, V A; Padilha, P; Zambuzzi, W F

Source: Journal of biomedical materials research. Part A; Jun 2017

### Publication Type(s): Journal Article

**Abstract:**It is important to understand the cellular and molecular events that occur at the cellmaterial interface of implants used for bone repair. The mechanisms involved in the initial stages of osteoblast interactions with the surface of the implant material must be decisive for cell fating surrounding them. In order to address this issue, we decided to investigate if conditioned medium for dental implants was able to modulate murine pre-osteoblast metabolism. **[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; Jun 2017

Publication Type(s): Published Erratum

### Color masking measurement for ceramic coating of titanium used for dental implants.

Author(s): Ajlouni, Khaldoun; Elshahawy, Waleed; Ajlouni, Raed; Sadakah, Abdelfattah

Source: The Journal of prosthetic dentistry; Jun 2017

### Publication Type(s): Journal Article

**Abstract:**STATEMENT OF PROBLEMPoor implant placement or thin gingival tissue and progressive bone resorption may lead to the dark metal color showing through the peri-implant soft tissue. Whether the dark color can be adequately masked is unclear.PURPOSEThe purpose of this in vitro

study was to test the color masking effect of porcelain applied on titanium used in fabricating the polished collar of tissue level implants. . **[ABSTRACT EDITED]** 

### Multidisciplinary approach to oral rehabilitation with dental implants after gunshot injury: A clinical report.

**Author(s):** Nícoli, Lélis Gustavo; Pigossi, Suzane Cristina; Araújo, Raphael Ferreira de Souza Bezerra; Marcantonio, Cláudio; Marcantonio, Élcio

Source: The Journal of prosthetic dentistry; Jun 2017

### Publication Type(s): Journal Article

**Abstract:**This clinical report describes a multidisciplinary approach to treat a patient with edentulism and a severe anatomic defect in the mandible caused by a gunshot injury by using an implant-fixed complete dental prosthesis. An immediate loading interim implant-fixed complete dental prosthesis in the mandible associated with a maxillary removable complete denture prosthesis was initially provided to restore the intermaxillary relation. Nasal floor elevation and maxillary sinus augmentation were subsequently performed to increase the maxillary bone volume. Definitive implant-fixed complete dental prostheses were placed in both arches in order to rehabilitate this initially compromised anatomic condition, which ensured patient satisfaction and improvement in masticatory function and esthetics.

#### Intake of Proton Pump Inhibitors Is Associated with an Increased Risk of Dental Implant Failure.

Author(s): Chrcanovic, Bruno Ramos; Kisch, Jenö; Albrektsson, Tomas; Wennerberg, Ann

Source: The International journal of oral & maxillofacial implants; Jun 2017

Publication Date: Jun 2017

### Publication Type(s): Journal Article

**Abstract:**PURPOSETo investigate the association between the intake of proton pump inhibitors (PPIs) and the risk of dental implant failure. . **[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; Jun 2017

### 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]** 

### Adjacent dental implants classification based on restorative design.

Author(s): Proussaefs, Periklis; AlHelal, Abdulaziz; Taleb, Abdulrahman; Kattadiyil, Mathew

Source: The Journal of oral implantology; Jun 2017

Publication Type(s): Journal Article

**Abstract:**There is controversy in the literature regarding the indicated retentive mechanism for implant supported crowns. When adjacent implants are restored, the restoration can be either screw retained, cement retained, or a combination of cement and screw retained. Adjacent implant supported crowns can be restored as individual implant supported crowns or they can be splinted. A classification system is proposed when adjacent implants are restored. The classification system describes currently available options to restore adjacent implants. Six types of prosthetic design options are proposed as Class I-VI. In Class I design individual cement retained crowns are made. In Class II individual screw retained crowns are fabricated. Class III involved fabrication of individual screw-retrievable / cement-retained crowns. Class IV prosthetic design involves splinted crowns and Class VI involves splinted screw-retrievable / cement-retained implant supported screw-retrievable / cement-retained crowns.

### Implant-Site Related and Patient-Based Factors With the Potential to Impact Patients' Satisfaction, Quality of Life Measures and Perceptions Toward Dental Implant Treatment.

Author(s): Topçu, Ali Orkun; Yamalık, Nermin; Güncü, Güliz N; Tözüm, Tolga F; El, Hakan; Uysal, Serdar; Hersek, Nur

Source: Implant dentistry; Jun 2017

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

**Abstract:**OBJECTIVESThe present study aimed at evaluating both the implant site-related and patient-based factors with the potential to affect the extent of patients' satisfaction and also their perceptions regarding dental implant treatment. Potential differences between the esthetic evaluations of dental patients and dental specialists were also considered. **[ABSTRACT EDITED]** 

### Effects of different numbers of mini-dental implants on alveolar ridge strain distribution under mandibular implant-retained overdentures.

Author(s): Warin, Pongsakorn; Rungsiyakull, Pimduen; Rungsiyakull, Chaiy; Khongkhunthian, Pathawee

Source: Journal of prosthodontic research; Jun 2017

**Abstract:**PURPOSETo investigate the strains around mini-dental implants (MDIs) and retromolar edentulous areas when using different numbers of MDIs in order to retain mandibular overdentures. **[ABSTRACT EDITED]** 

### Synergistic interactions between corrosion and wear at titanium-based dental implant connections: A scoping review.

**Author(s):** Apaza-Bedoya, K; Tarce, M; Benfatti, C A M; Henriques, B; Mathew, M T; Teughels, W; Souza, J C M

Source: Journal of periodontal research; Jun 2017

Publication Type(s): Journal Article Review

**Abstract:**Two-piece implant systems are mainly used in oral implantology involving an osseointegrated implant connected to an abutment, which supports prosthetic structures. It is well documented that the presence of microgaps, biofilms and oral fluids at the implant-abutment connection can cause mechanical and biological complications. The aim of this review paper was to report the degradation at the implant-abutment connection by wear and corrosion processes taking place in the oral cavity. **[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; Jun 2017

#### 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]** 

#### 30 years of translational research in zirconia dental implants: A systematic review of the literature.

Author(s): Siddiqi, Allauddin; Khan, Abdul Samad; Zafar, Sobia

Source: The Journal of oral implantology; Jun 2017

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

**Abstract:**Thirty years of transitional research in zirconia (Zr) ceramics has led significant improvements in the biomedical field especially in dental Implantology. Oral implants made of Yttriatetragonal zirconia polycrystals (Y-TZP) because of their excellent mechanical properties, good biocompatibility and aesthetically acceptable colour have emerged as an attractive metal-free alternative to titanium implants. The aim of the review was to highlight the translation research in Zr dental implants that has been conducted over the last three decades using pre-clinical animal models. . **[ABSTRACT EDITED]** 

### Comparative evaluation of topographical data of dental implant surfaces applying optical interferometry and scanning electron microscopy.

Author(s): Kournetas, N; Spintzyk, S; Schweizer, E; Sawada, T; Said, F; Schmid, P; Geis-Gerstorfer, J; Eliades, G; Rupp, F

Source: Dental materials : official publication of the Academy of Dental Materials; Jun 2017

### Publication Type(s): Journal Article

**Abstract**:OBJECTIVEComparability of topographical data of implant surfaces in literature is low and their clinical relevance often equivocal. The aim of this study was to investigate the ability of scanning electron microscopy and optical interferometry to assess statistically similar 3-dimensional roughness parameter results and to evaluate these data based on predefined criteria regarded relevant for a favorable biological response. [ABSTRACT EDITED]

### Displacement of Dental Implant Into the Submental Space After Surgical Integration.

Author(s): Kirtay, Mustafa; Yolcu, Umit; Dundar, Serkan

Source: The Journal of craniofacial surgery; Jun 2017; vol. 28 (no. 4); p. e403

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

**Abstract:**Osseointegrated dental implants are common and widely used to treat edentulism. Implant displacement into the maxillofacial spaces during surgery or after a period of use is a complication recognized in the literature. Foreign objects such as titanium dental implants in the maxillofacial region must be removed because they cause infection due to tissue reaction. In this report, the

authors present the case of a patient whose dental implant slipped into the submental space after surgical integration and describe the surgical removal of the implant via an extraoral approach.

### Endoscopic Removal of a Dental Implant From Maxillary Sinus.

Author(s): Dundar, Serkan; Karlidag, Turgut; Keles, Erol

Source: The Journal of craniofacial surgery; Jun 2017; vol. 28 (no. 4); p. 1003-1004

Publication Type(s): Journal Article

**Abstract:**The displacement of a dental implant into the maxillary sinus during surgery or after a period of use is a complication defined in the dental implant clinical practice. This complication arises primarily from inadequate bone height and peri-implant infection. Specifically, foreign objects in the maxillary sinus can cause sinusitis via impaired mucociliary flow and foreign body reactions, so they must be removed. **[ABSTRACT EDITED]** 

### Use of Thudichum nasal speculum for retraction during insertion of dental implants.

Author(s): Vadepally, Ashwant Kumar; Sinha, Ramen

Source: The British journal of oral & maxillofacial surgery; Jun 2017; vol. 55 (no. 5); p. 554-555

Publication Type(s): Journal Article

### Gallium and silicon synergistically promote osseointegration of dental implant in patients with osteoporosis.

Author(s): Liu, Jinsong; Wu, Zuosu; He, Hongli; Cai, Kaiyong; Zhang, Hualin; Xu, Lihua

Source: Medical hypotheses; Jun 2017; vol. 103 ; p. 35-38

### Publication Type(s): Journal Article

**Abstract**:Over the last few decades, a wide variety of dental implants have been successfully placed in jaw bones to restore tooth function. But major challenges still remain in patients with osteoporosis involving compromised osseointegration, and the therapeutic methods is far from optimism. **[ABSTRACT EDITED]** 

### Effect of lubricant on the reliability of dental implant abutment screw joint: An in vitro laboratory and three-dimension finite element analysis.

Author(s): Wu, Tingting; Fan, Hongyi; Ma, Ruiyang; Chen, Hongyu; Li, Zhi; Yu, Haiyang

**Source:** Materials science & engineering. C, Materials for biological applications; Jun 2017; vol. 75 ; p. 297-304

Publication Type(s): Journal Article

**Abstract**:Biomechanical factors play a key role in the success of dental implants. Fracture and loosening of abutment screws are major issues. This study investigated the effect of lubricants on the stability of dental implant-abutment connection. As lubricants, graphite and vaseline were coated on the abutment screw surface, respectively, and a blank without lubricant served as the control. **[ABSTRACT EDITED]** 

### Augmentation of keratinized gingiva around dental implants.

Author(s): Kissa, J; El Kholti, W; Laalou, Y; El Farouki, M

Source: Journal of stomatology, oral and maxillofacial surgery; Jun 2017; vol. 118 (no. 3); p. 156-160

Publication Type(s): Journal Article

**Abstract:**To date, there is no general consensus with respect to the amount of soft-tissue volume needed for esthetic and functional purposes on the buccal aspect of dental implants. Numerous studies have investigated the relationship between the width of keratinized mucosa and the health of peri-implant tissues. Our purpose was to discuss about the necessity of keratinized tissue to maintain the peri-implant health and to report clinical efficacy of different techniques used to increase the keratinized tissue around dental implants.

#### Interim Prosthesis Options for Dental Implants.

Author(s): Siadat, Hakimeh; Alikhasi, Marzieh; Beyabanaki, Elaheh

**Source:** Journal of prosthodontics : official journal of the American College of Prosthodontists; Jun 2017; vol. 26 (no. 4); p. 331-338

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

**Abstract:**Dental implants have become a popular treatment modality for replacing missing teeth. In this regard, the importance of restoring patients with function during the implant healing period has grown in recent decades. Esthetic concerns, especially in the anterior region of the maxilla, should also be considered until the definitive restoration is delivered. Another indication for such restorations is maintenance of the space required for esthetic and functional definitive restorations in cases where the implant site is surrounded by natural teeth. Numerous articles have described different types of interim prostheses and their fabrication techniques. This article aims to briefly discuss all types of implant-related interim prostheses by different classification including provisional timing (before implant placement, after implant placement in unloading and loading periods), materials, and techniques used for making the restorations, the type of interim prosthesis retention, and definitive restoration. Furthermore, the abutment torque for such restorations and methods for transferring the soft tissue from interim to definitive prostheses are addressed.

### New mini dental implant attachments versus O-ring attachment after cyclic aging: Analysis of retention strength and gap space.

### Author(s): Fatalla, Abdalbseet A; Song, Ke; Cao, Ying-Guang

**Source:** Journal of Huazhong University of Science and Technology. Medical sciences = Hua zhong ke ji da xue xue bao. Yi xue Ying De wen ban = Huazhong keji daxue xuebao. Yixue Yingdewen ban; Jun 2017; vol. 37 (no. 3); p. 419-424

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

**Abstract:**Overdenture as a treatment modality for both partially and fully edentulous patients is costeffective and less expensive. The purpose of the present study was to examine the newly fabricated attachments by comparing them with conventional O-ring attachment in vitro in terms of retention force and cyclic aging resistance. **[ABSTRACT EDITED]** 

### Is the intake of selective serotonin reuptake inhibitors associated with an increased risk of dental implant failure?

Author(s): Chrcanovic, B R; Kisch, J; Albrektsson, T; Wennerberg, A

Source: International journal of oral and maxillofacial surgery; Jun 2017; vol. 46 (no. 6); p. 782-788

### Publication Type(s): Journal Article

**Abstract:**The aim of this retrospective study was to investigate the association between the intake of selective serotonin reuptake inhibitors (SSRIs) and the risk of dental implant failure. Patients were included if they were taking SSRIs only and no other medication, did not present any other systemic

condition or compromising habits (bruxism, smoking, snuff), and complied with the use of prophylactic antibiotics for implant surgery. . **[ABSTRACT EDITED]** 

### The Impact of Residual Subgingival Cement on Biological Complications Around Dental Implants: A Systematic Review.

Author(s): Quaranta, Alessandro; Lim, Zhuo Wei; Tang, Joyce; Perrotti, Vittoria; Leichter, Jonathan Source: Implant dentistry; Jun 2017; vol. 26 (no. 3); p. 465-474

### Publication Type(s): Journal Article

**Abstract:**OBJECTIVESTo perform a systematic review on the impact of residual subgingival cement on peri-implant diseases and crestal bone loss. . **[ABSTRACT EDITED]** 

### Maxillary Sinus Augmentation for Dental Implant Rehabilitation of the Edentulous Ridge: A Comprehensive Overview of Systematic Reviews.

Author(s): Ting, Miriam; Rice, Jeremy G; Braid, Stanton M; Lee, Cameron Y S; Suzuki, Jon B

Source: Implant dentistry; Jun 2017; vol. 26 (no. 3); p. 438-464

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

**Abstract:**OBJECTIVESThe objective of this systemic review was to perform a comprehensive overview of systematic reviews and meta-analyses of the maxillary sinus augmentation procedure for implant rehabilitation in humans. The following were evaluated in this overview: (1) anatomic variables affecting sinus augmentation, (2) histomorphometric analysis of the grafted sinus, (3) volumetric changes after sinus grafting, and (4) implant survival beyond 1 year. [**ABSTRACT EDITED**]

### Randomized Controlled Trial Comparing the Effects of 2 Analgesic Drug Protocols in Patients who Received 5 Dental Implants.

Author(s): Meta, Isaac Fernando; Bermolen, Miriam; Macchi, Ricardo; Aguilar, Jorge

Source: Implant dentistry; Jun 2017; vol. 26 (no. 3); p. 412-416

Publication Type(s): Journal Article

**Abstract:**PURPOSEThis randomized controlled trial compares postoperative pain and swelling after placing dental implants in patients treated with nonsteroidal anti-inflammatory drugs (NSAIDs) versus NSAIDs and corticosteroids. . **[ABSTRACT EDITED]** 

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May/ June 2017, Volume 32, Issue 3

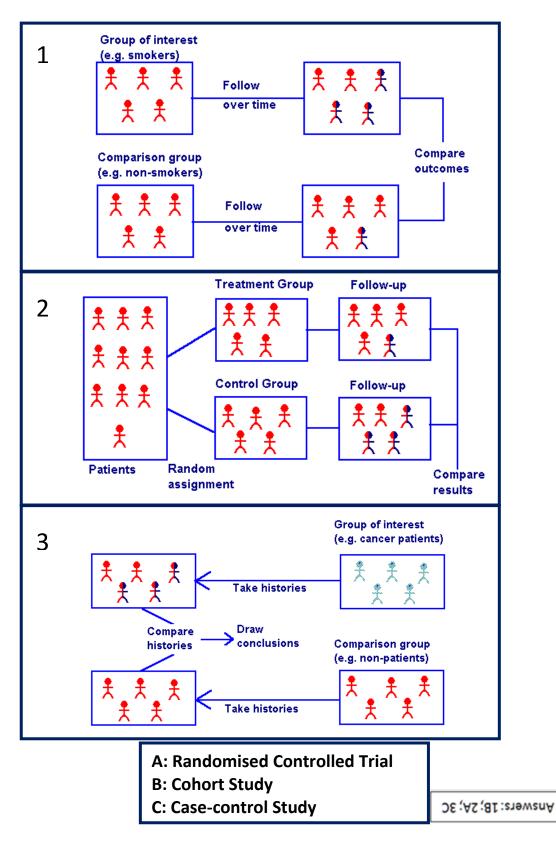
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