

Restorative Dentistry

# Evidence Update August 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)			
	, , , , , , , , , , , , , , , , , , ,	Interpreting Statistics		
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September (13.00-14.00)				
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	Fri 1st	Literature Searching		
	Mon 4th	Critical Appraisal		
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	Tue 12th	Interpreting Statistics		
	Tue 12th Wed 20th	Interpreting Statistics Literature Searching		

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**Outreach:** Your Outreach Librarian can help facilitate evidence-based practice for all in the restorative dentistry team, as well as assisting with academic study and research. We can help with **literature searching, obtaining journal articles and books**. We also offer one-to-one or small group training in **literature searching, accessing electronic journals, and critical appraisal**. Get in touch: <u>library@uhbristol.nhs.uk</u>

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### The Latest Evidence for Restorative Dentistry





Pit and fissure sealants for preventing dental decay in permanent teeth

Anneli Ahovuo-Saloranta, Helena Forss, Tanya Walsh, Anne Nordblad, Marjukka Mäkelä, Helen V Worthington

Online Publication Date: July 2017

Topical silver diamine fluoride for managing dental caries in children and adults

Anjana Rajendra, Analia Veitz-Keenan, Branca Heloisa Oliveira, Ryan R Ruff, May CM Wong, Nicola PT Innes, John Radford, Nassar Seifo, Richard Niederman

Online Publication Date: July 2017

## **UpToDate**<sup>®</sup> OpenAthens login required. Register here: <u>https://openathens.nice.org.uk/</u> Treatment of dry mouth and other non-ocular sicca symptoms in Sjögren's syndrome • Restorative and cosmetic dentistry o Summary and recommendations Medication-related osteonecrosis of the jaw in patients with cancer o **Prevention** Summary and recommendations 0 0 Risks of therapy with bone antiresorptive agents in patients with advanced malignancy o Osteonecrosis of the jaw o Summary and recommendations Management of late complications of head and neck cancer and its treatment o Summary and Recommendations **Overview of the management and prognosis of Sjögren's syndrome** Summary and recommendations Toxicity of molecularly targeted antiangiogenic agents: Non-cardiovascular effects o Osteonecrosis of the jaw

o <u>Summary and recommendations</u>

# The Dental Elf

Dental implant placement into fresh extraction sockets

Aug 2 2017 Mark-Steven Howe

Dental implants: survival rates in patients with osteoporosis

Jul 28 2017 Derek Richards

Periodontal regeneration therapies: Are benefits long-term?

Jul 24 2017 Derek Richards

Short dental implants for the atrophic posterior mandible?

Jul 12 2017 Mark-Steven Howe



### What is KnowledgeShare?

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### **Targeted evidence updates**

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.

# Collaboration and knowledge sharing

As more library and knowledge services join KnowledgeShare it becomes more powerful for sharing evidence and generating communities of practice.

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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: <u>library@uhbristol.nhs.uk</u>

### **Peri-implantitis**

### Chitosan brush for professional removal of plaque in mild peri-implantitis.

Author(s): Zeza, Blerina; Wohlfahrt, Caspar; Pilloni, Andrea

Source: Minerva stomatologica; Aug 2017; vol. 66 (no. 4); p. 163-168

Publication Type(s): Journal Article

**Abstract:**BACKGROUNDThe aim of the study was to evaluate the effectiveness of a chitosan brush on the treatment of mild peri-implantitis. **[ABSTRACT EDITED]** 

## The influence of different abutment materials on tissue regeneration after surgical treatment of peri-implantitis - a randomized controlled preclinical study.

Author(s): Moest, Tobias; Wrede, Jan; Schmitt, Christian Martin; Stamp, Melanie; Neukam, Friedrich Wilhelm; Schlegel, Karl Andreas

**Source:** Journal of cranio-maxillo-facial surgery : official publication of the European Association for Cranio-Maxillo-Facial Surgery; Aug 2017; vol. 45 (no. 8); p. 1190-1196

Publication Type(s): Journal Article

**Abstract**:OBJECTIVESThis study aimed to assess the impact of different abutment materials on periimplant tissue regeneration after surgical treatment of peri-implantitis in a large animal model. [ABSTRACT EDITED]

### 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 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. **[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: 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]** 

### 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

**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]** 

## Non-surgical treatment of peri-implant mucositis and peri-implantitis at two-piece zirconium implants: A clinical follow-up observation after up to 3 years.

Author(s): John, Gordon; Becker, Jürgen; Schmucker, Andrea; Schwarz, Frank

Source: Journal of clinical periodontology; Jul 2017; vol. 44 (no. 7); p. 756-761

Publication Type(s): Case Reports

**Abstract:**OBJECTIVESTo assess the long-term clinical outcomes following non-surgical therapy of peri-implant diseases at two-piece zirconium implants. **[ABSTRACT EDITED]** 

### Oral infection with Porphyromonas gingivalis induces peri-implantitis in a murine model: Evaluation of bone loss and the local inflammatory response.

Author(s): Tzach-Nahman, Rinat; Mizraji, Gabriel; Shapira, Lior; Nussbaum, Gabriel; Wilensky, Asaf

Source: Journal of clinical periodontology; Jul 2017; vol. 44 (no. 7); p. 739-748

Publication Type(s): Journal Article

**Abstract:**AIMPeri-implantitis is a major health concern, with unclear pathogenesis, and with no accessible animal models. Our aim was to establish a mouse model for peri-implantitis and to investigate mediators of inflammation. **[ABSTRACT EDITED]** 

## Transforming growth factor- $\beta$ , interleukin-17, and IL-23 gene expression profiles associated with human peri-implantitis.

Author(s): Mardegan, Gustavo Pereira; Shibli, Jamil Awad; Roth, Leandro Amadeu; Faveri, Marcelo; Giro, Gabriela; Bastos, Marta Ferreira

Source: Clinical oral implants research; Jul 2017; vol. 28 (no. 7); p. e10

### Publication Type(s): Journal Article

**Abstract:**OBJECTIVESThe mRNA expression profiles of IL-23/Th17 and the Treg-associated cytokine TGF- $\beta$  in peri-implantitis are currently under research. This study characterized the IL-17, IL-23, and TGF- $\beta$  gene expression levels in healthy and diseased peri-implant tissues and correlated these data with radiographic bone loss. **[ABSTRACT EDITED]** 

## Th17-related cytokines in mucositis: is there any difference between peri-implantitis and periodontitis patients?

Author(s): Teixeira, Mayla Kezy Silva; Lira-Junior, Ronaldo; Telles, Daniel Moraes; Lourenço, Eduardo José Veras; Figueredo, Carlos Marcelo

Source: Clinical oral implants research; Jul 2017; vol. 28 (no. 7); p. 816-822

### Publication Type(s): Journal Article

**Abstract:**OBJECTIVEThis study aimed to compare Th17-related cytokines named IL-1 $\beta$ , IL-4, IL-6, IL-10, IL-17A, IL-17F, IL-21, IL-22, IL-23, IL-25, IL-31, IL-33, IFN- $\gamma$ , sCD40L and TNF- $\alpha$  in peri-implant fluid (PIF) from mucositis sites in patients having either peri-implantitis, periodontitis or without interproximal alveolar bone loss. **[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 Type(s): Journal Article

**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]** 

### Peri-Implantitis Associated With a Pre-Existing Pathology.

Author(s): Oh, Se-Lim

Source: The Journal of oral implantology; Jun 2017; vol. 43 (no. 3); p. 232-236

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

**Abstract:**This case report presents a treatment of peri-implantitis associated with a pre-existing pathology. **[ABSTRACT EDITED]** 

## Surgical Treatment of Severe Peri-Implantitis Using a Round Titanium Brush for Implant Surface Decontamination: A Case Report With Clinical Reentry.

Author(s): An, Yin-Zhe; Lee, Jae-Hong; Heo, Young-Ku; Lee, Jung-Seok; Jung, Ui-Won; Choi, Seong-Ho Source: The Journal of oral implantology; Jun 2017; vol. 43 (no. 3); p. 218-225

Publication Type(s): Journal Article

**Abstract:**The most common cause of peri-implantitis is the accumulation of plaque and the formation of a biofilm on the implant surface. Terminating the development of the disease requires the biofilm to be removed from the implant surface. This paper describes 2 cases of severe peri-implantitis lesions treated through surgical approaches. **[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): Journal Article

**Abstract**:BACKGROUNDThere 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]** 

### 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

**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]** 

## In Vitro Laser Treatment Platform Construction with Dental Implant Thread Surface on Bacterial Adhesion for Peri-Implantitis.

Author(s): Kuo, Hsien-Nan; Mei, Hsiang-I; Liu, Tung-Kuan; Liu, Tse-Ying; Lo, Lun-Jou; Lin, Chun-Li

Source: BioMed Research International; Jul 2017 ; p. 1-7

Publication Date: Jul 2017

Publication Type(s): Academic Journal

Available in full text at BioMed Research International - from EBSCOhost

**Abstract:**This study constructs a standard in vitro laser treatment platform with dental implant thread surface on bacterial adhesion for peri-implantitis at different tooth positions. **[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]** 

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

## Underlying mechanisms and therapeutic strategies for bisphosphonate-related osteonecrosis of the jaw (BRONJ)

Author(s): Endo Y.; Takahashi T.; Kumamoto H.; Nakamura M.; Sugawara S.; Takano-Yamamoto T.

Source: Biological and Pharmaceutical Bulletin; 2017; vol. 40 (no. 6); p. 739-750

### Publication Type(s): Review

**Abstract:**Bisphosphonates (BPs), with a non-hydrolysable P-C-P structure, are cytotoxic analogues of pyrophosphate, bind strongly to bone, are taken into osteoclasts during bone-resorption and exhibit long-acting anti-bone-resorptive effects. Among the BPs, nitrogen-containing BPs (N-BPs) have far stronger anti-boneresorptive effects than non-N-BPs. In addition to their pyrogenic and digestive-organ-injuring side effects, BP-related osteonecrosis of jaws (BRONJ), mostly caused by N-BPs, has been a serious concern since 2003. The mechanism underlying BRONJ has proved difficult to unravel, and there are no solid strategies for treating and/or preventing BRONJ. **[ABSTRACT EDITED]** 

### A case of tooth fracture occurred upon medicating bisphosphonate for an elderly person: Preservation therapy and responses for Stage 0 of bisphosphonate-related osteonecrosis of jaw.

Author(s): Suzuki, Noriko; Oguchi, Hitoshi; Yamauchi, Yu; Karube, Yasuyo; Suzuki, Yukimi;

Source: European journal of dentistry; 2017; vol. 11 (no. 2); p. 258-263

Publication Type(s): Journal Article

**Abstract:**This case report aimed to report the progress of preservation therapy and response of symptoms and signs for Stage 0 of bisphosphonate-related osteonecrosis of jaw (BRONJ). **[ABSTRACT EDITED]** 

## A Case of Bisphosphonate-Related Osteonecrosis of the Jaw in a Patient with Subpontic Osseous Hyperplasia.

Author(s): Tsuji, Chiaki; Watanabe, Hiroshi; Nakayama, Hidenori; Goto, Mitsuo; Kurita, Kenichi

#### Source: Case reports in dentistry; 2017; vol. 2017; p. 9659761

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

Available in full text at Case Reports in Dentistry - from ProQuest

**Abstract**:Subpontic osseous hyperplasia (SOH) is a growth of bone occurring on the edentulous ridge beneath the pontics of fixed partial dentures (FPDs). This report describes a case of bisphosphonate-(BP-) related osteonecrosis of the jaw (BRONJ) in a SOH patient followed by deciduation of the bony lesion. **[ABSTRACT EDITED]** 

# A multicenter retrospective study of the risk factors associated with medication-related osteonecrosis of the jaw after tooth extraction in patients receiving oral bisphosphonate therapy: can primary wound closure and a drug holiday really prevent MRONJ?

Author(s): Hasegawa, T; Kawakita, A; Ueda, N; Funahara, R; Tachibana, A; Kobayashi, M; Kondou, E

**Source:** Osteoporosis international : a journal established as result of cooperation between the European Foundation for Osteoporosis and the National Osteoporosis Foundation of the USA; Aug 2017; vol. 28 (no. 8); p. 2465-2473

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

**Abstract:**Root amputation, extraction of a single tooth, bone loss or severe tooth mobility, and an unclosed wound were significantly associated with increased risk of developing medication-related osteonecrosis of the jaw (MRONJ). We recommend a minimally traumatic extraction technique, removal of any bone edges, and mucosal wound closure as standard procedures in patients receiving bisphosphonates.INTRODUCTIONOsteonecrosis of the jaws can occur following tooth extraction in patients receiving bisphosphonate drugs. Various strategies for minimizing the risk of MRONJ have been advanced, but no studies have comprehensively analyzed the efficacy of factors such as primary wound closure, demographics, and drug holidays in reducing its incidence. The purpose of this study was to retrospectively investigate the relationships between these various risk factors after tooth extraction in patients receiving oral bisphosphonate therapy. **[ABSTRACT EDITED]** 

#### Bisphosphonate-Related Osteonecrosis and Metastasis Within the Same Site of the Jaw.

Author(s): Corsi, Alessandro; Ungari, Claudio; Riminucci, Mara; Agrillo, Alessandro

Source: Journal of Oral & Maxillofacial Surgery (02782391); Aug 2017; vol. 75 (no. 8); p. 1679-1684

### Publication Type(s): Academic Journal

**Abstract:**Osteonecrosis of the jaw (ONJ) is a well known complication in patients treated with bisphosphonates (BPs) for skeletal metastasis and multiple myeloma (MM). Few oncologic patients under treatment with BPs and with ONJ and metastasis or MM at the same site of the jaw have been described. We report here on a 54-year old white female who was treated with intra-venous zoledronic acid for skeletal metastasis of breast cancer who developed ONJ. **[ABSTRACT EDITED]** 

## Strontium ranelate treatment in a postmenopausal woman with osteonecrosis of the jaw after long-term oral bisphosphonate administration: A case report

Author(s): Pan W.-L.; Lin C.-Y.; Ju Y.-R.; Chan C.-P.; Chen P.-L.; Pan Y.-C.; Hsu R.W.W.

Source: Clinical Interventions in Aging; Jul 2017; vol. 12; p. 1089-1093

Publication Type(s): Article

Available in full text at Clinical Interventions in Aging - from National Library of Medicine

**Abstract:**Bisphosphonates (BPs) suppress bone resorption and increase bone strength, thus reducing the risk of fracture. Oral BPs are widely used for the prevention and treatment of osteoporosis and

osteopenia. Here, we describe the case of a postmenopausal woman who took oral alendronate for >3 years for osteoporosis. [ABSTRACT EDITED]

## Why worry about bisphosphonate-related osteonecrosis of the jaw? A guide to diagnosis, initial management, and referral of patients

Author(s): Payne K.F.B.; Goodson A.M.C.; Tahim A.S.; Rafi I.; Brennan P.A.

Source: British Journal of General Practice; Jul 2017; vol. 67 (no. 660); p. 330-331

### Publication Type(s): Article

Available in full text at British journal of general practice: the journal of the Royal College of General Practitioners [Br J Gen Pract] NLMUID: 9005323, The - from EBSCOhost

## Extensive Surgical Procedures Result in Better Treatment Outcomes for Bisphosphonate-Related Osteonecrosis of the Jaw in Patients With Osteoporosis

Author(s): Kim H.Y.; Lee S.-J.; Kim S.M.; Myoung H.; Hwang S.J.; Choi J.-Y.; Lee J.-H.; Choung P.-H.

Source: Journal of Oral and Maxillofacial Surgery; Jul 2017; vol. 75 (no. 7); p. 1404-1413

### Publication Type(s): Article

**Abstract:**Purpose To identify the risk factors associated with relapse or treatment failure after surgery for bisphosphonate-related osteonecrosis of the jaw (BRONJ) in patients with osteoporosis. **[ABSTRACT EDITED]** 

## Bisphosphonate-Related Osteonecrosis and Metastasis Within the Same Site of the Jaw: Expected for Multiple Myeloma, But Unusual for Breast Cancer

Author(s): Altundag K.

Source: Journal of Oral and Maxillofacial Surgery; Jul 2017; vol. 75 (no. 7); p. 1309-1310

### Publication Type(s): Letter

## 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 ProQuest

**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]** 

## Response to comment on "Reversal lines associated with Actinomyces infection in bisphosphonate-related osteonecrosis of the jaw".

Author(s): Kim, Soung Min; Lee, Suk Keun

**Source:** Oral surgery, oral medicine, oral pathology and oral radiology; Jun 2017; vol. 123 (no. 6); p. 739-741

#### Publication Type(s): Letter

A microorganism not to be overlooked in studies focusing on osteonecrosis of the jaws: Comment on "Kim SM, et al. Histochemical observation of bony reversal lines in bisphosphonate-related osteonecrosis of the jaw".

Author(s): Gülses, Aydin; Ayna, Mustafa; Açil, Yahya

**Source:** Oral surgery, oral medicine, oral pathology and oral radiology; Jun 2017; vol. 123 (no. 6); p. 738-739

### Publication Type(s): Letter

### **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.; Rau A.

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. **[ABSTRACT EDITED]** 

### Teratogenicity of antiepileptic drugs

Author(s): Guveli B.T.; Atakl D.; Rosti R.O.; Kayserili H.; Guzeltas A.; Tuna E.B.; Sencer S.; Yekeler E.;

Source: Clinical Psychopharmacology and Neuroscience; 2017; vol. 15 (no. 1); p. 19-27

### Publication Date: 2017

### Publication Type(s): Article

**Abstract:**Objective: Antiepileptic drugs (AED) have chronic teratogenic effects, the most common of which are congenital heart disease, cleft lip/palate, urogenital and neural tube defects. The aim of our study is to examine teratogenic effects of AED and the correlation between these malformations and AED in single or multiple pregnancies. **[ABSTRACT EDITED]** 

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

Author(s): Tehranchi A.; Behnia H.; Nadjmi N.; Yassaee V.R.; Ravesh Z.; Mina M.

Source: International Journal of Surgery Case Reports; 2017; vol. 30 ; p. 142-147

### Publication Type(s): Article

**Abstract:**Introduction Van 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 presentation We describe the orthodontic treatment of a girl diagnosed with VWS referred by her family dentist for her cosmetic concerns. **[ABSTRACT EDITED]** 

## Clinical outcome of tooth-supported fixed partial dentures in unilateral cleft lip and palate patients: A case series.

Author(s): Bhandari, Sudhir

Source: Journal of Indian Prosthodontic Society; 2017; vol. 17 (no. 1); p. 68-73

Publication Type(s): Journal Article

Available in full text at Journal of Indian Prosthodontic Society - from ProQuest

**Abstract:**INTRODUCTIONCleft lip and palate (CLP) is the most frequent congenital facial abnormality and multidisciplinary treatment extending over many years is necessary to rehabilitate the affected individuals to normal function and esthetics.OBJECTIVETo evaluate the clinical treatment outcome for missing teeth with tooth supported fixed partial dentures in unilateral cleft lip and palate patients. **[ABSTRACT EDITED]** 

## 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

### Available in full text at Journal of Clinical Pediatric Dentistry, The - from ProQuest

**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]** 

## 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

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. **[ABSTRACT EDITED]** 

### 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.

## Maxillary Distraction Osteogenesis in Unilateral Cleft Lip and Palate Patients with Rigid External Distraction System.

Author(s): Alkhouri, Shadi; Waite, Peter D; Davis, Matthew B; Lamani, Ejvis; Kau, Chung How

### Source: Annals of maxillofacial surgery; 2017; vol. 7 (no. 1); p. 57-63

### Publication Type(s): Journal Article

**Abstract:**AIMDistraction osteogenesis (DO) is a treatment option for patients with maxillary hypoplasia secondary to cleft lip and palate (CLP).PURPOSEThe aim of this study is to present a technique for maxillary DO using Le Fort I osteotomy with rigid external distraction (RED) system. **[ABSTRACT EDITED]** 

# Orthodontic Treatment and Maxillary Anterior Segmental Distraction Osteogenesis of a Subject with Williams-Beuren Syndrome and Isolated Cleft Palate: A Long-Term Follow-Up from the Age of 5 to 24 Years.

Author(s): Yamaguchi, Tetsutaro; Shirota, Tatsuo; Adel, Mohamed; Takahashi, Masahiro;

Source: Case reports in dentistry; 2017; vol. 2017 ; p. 7019045

Publication Type(s): Journal Article

Available in full text at Case Reports in Dentistry - from ProQuest

**Abstract:**Williams-Beuren syndrome (WBS) is a rare multisystem disorder caused by a hemizygous deletion of the elastin gene on chromosome 7q11.23. WBS patients have characteristic skeletal features and dental anomalies accompanied by mental retardation, a friendly outgoing personality, and mild to moderate intellectual disability or learning problems. In this case report, we present the combined orthodontic and surgical treatment of a WBS patient with an isolated cleft palate through a long-term follow-up from the age of 5 to 24 years. **[ABSTRACT EDITED]** 

#### Cleft palate only: current concepts.

Author(s): Tettamanti, L; Avantaggiato, A; Nardone, M; Silvestre-Rangil, J; Tagliabue, A

Source: ORAL & implantology; 2017; vol. 10 (no. 1); p. 45-52

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

**Abstract:**Cleft palate only (CPO) is one of the most common congenital malformations worldwide. The etiopathogenesis of CPO is not completely understood. Environmental factors, such as smoking, alcohol consumption, intake of drugs during pregnancy, advanced paternal age, have been demonstrated to be a risk of CPO, but conflicting results have also been published. Insufficient intake of folic acid during the pregnancy has been suggested to increase the risk for CPO. The demonstrated risk for siblings and the higher risk for monozygotic twins suggest a genetic etiopathogenesis for CPO. In some cases of CPO a prevalent mode of inheritance has been reported, but oligogenic models with reduced penetrance, and the risk related to environmental factors have also been proved. **[ABSTRACT EDITED]** 

### A Comprehensive Study of Palate Development in Miniature Pig

Author(s): Sun L.; Wang J.; Liu H.; Fan Z.; Wang S.; Du J.

Source: Anatomical Record; Aug 2017; vol. 300 (no. 8); p. 1409-1419

### Publication Type(s): Article

**Abstract:**Palate development is an important morphogenetic event in facial development, including the fusion of the lateral and medial nasal portions of the frontonasal process and maxilla. Derailments of any of these events may result in cleft palate, the most frequent congenital craniofacial abnormality. Recent research has shown that the microanatomy of the miniature pig oral maxillofacial region is quite similar to that of humans, and the use of miniature pigs as a large animal model for dental and orofacial research is increasing. Little information is available, however,

about the development of the miniature pig palate. Here, using histological and ultrastructural methods, we describe the developmental stages of the palate in miniature pigs. **[ABSTRACT EDITED]** 

# A Comparative Analysis of Recombinant Human Bone Morphogenetic Protein-2 with a Demineralized Bone Matrix versus Iliac Crest Bone Graft for Secondary Alveolar Bone Grafts in Patients with Cleft Lip and Palate: Review of 501 Cases.

Author(s): Hammoudeh, Jeffrey A; Fahradyan, Artur; Gould, Daniel J; Liang, Fan;

Source: Plastic and reconstructive surgery; Aug 2017; vol. 140 (no. 2); p. 318e

Publication Type(s): Journal Article

**Abstract**:BACKGROUNDAlveolar cleft reconstruction using iliac crest bone graft is considered standard of care for children with complete cleft lip and palate at the time of mixed dentition. Harvesting bone may result in donor-site morbidity and additional operating time and length of hospitalization. Recombinant human bone morphogenetic protein (rhBMP)-2 with a demineralized bone matrix is an alternative bone source for alveolar cleft reconstruction. The authors investigated the outcomes of rhBMP-2/demineralized bone matrix versus iliac crest bone graft for alveolar cleft reconstruction by reviewing postoperative surgical complications and cleft closure. **[ABSTRACT EDITED]** 

## Treatment outcomes of pre-surgical infant orthopedics in patients with non-syndromic cleft lip and/or palate: A systematic review and meta-analysis of randomized controlled trials

Author(s): Hosseini H.R.; Kaklamanos E.G.; Athanasiou A.E.

Source: PLoS ONE; Jul 2017; vol. 12 (no. 7)

Publication Type(s): Article

### Available in full text at PLoS One - from ProQuest

**Abstract:**Background: Non-syndromic clefts lip and/or palate (CL/P) defects may have manifold significant and detrimental consequences for the affected individuals and their family environment. Although the use of pre-surgical infant orthopedics (PSIO) was introduced as a means to improve management and treatment outcomes, there still remains a controversy. Objective: To investigate the effectiveness of PSIO in patients with non-syndromic CL/P and evaluate the quality of the available evidence. Search methods: Search without restrictions, together with hand searching, until May 2016. Selection criteria: Randomized clinical trials investigating the effects of pre-surgical infant orthopedic appliances. **[ABSTRACT EDITED]** 

### Could this be hay-wells syndrome without ankyloblepharon?: A rare disorder in a nigerian child

Author(s): Katibi O.; Suberu H.

Source: Pediatric Dermatology; Jul 2017; vol. 34

Publication Type(s): Conference Abstract

**Abstract:**Introduction: Hay-Wells syndrome also known as Ankyloblepharon- Ectodermal defects-Cleft lip/palate (AEC) syndrome is a rare autosomal dominant disorder of the skin, hair and nails.1 It was first described in 1976 by Hay and Wells in seven individuals from four families.2 This is a report of a female neonate delivered with extensive skin erosions, dysplastic nails, sparse hair distribution, cleft palate but no ankyloblepharon. **[ABSTRACT EDITED]** 

Low laser Therapy: a strategy to promote the osteogenic differentiation of deciduous dental pulp stem cells from Cleft Lip and Palate patients.

Author(s): Pinheiro, Carla Cristina Gomes; de Pinho, Milena Correa; Aranha, Ana Cecília Corrêa Source: Tissue engineering. Part A; Jul 2017

### Publication Type(s): Journal Article

**Abstract:**Dental pulp stem cells (DPSC) can undergo several types of differentiation, including osteogenic differentiation. One osteogenesis-inducing factor that has been previously described is "in vitro" low-level laser irradiation of cells. Laser irradiation promotes the acceleration of bone matrix mineralization of the cell strain. However, no consensus exists regarding the dose and treatment time. We used DPSC strains from cleft lip and palate patients because new bone tissue engineering strategies have used DPSC in preclinical and clinical trials for the rehabilitation of alveolar bone clefts. Optimizing bone tissue engineering techniques for cleft and lip palate patients by applying low-level laser therapy to DPSC obtained from these patients can help improve current strategies to quickly close large alveolar clefts. The aim of this study was to investigate the effects of low-level laser therapy at different energy densities in DPSC strains obtained from cleft lip and palate patients during "in vitro" osteogenic differentiation[**ABSTRACT EDITED**]

## Incisor and molar overjet, arch contraction, and molar relationship in the mixed dentition in repaired complete unilateral cleft lip and palate: A qualitative and quantitative appraisal.

Author(s): Disthaporn, Suteeta; Suri, Sunjay; Ross, Bruce; Tompson, Bryan; Baena, Diogenes;

Source: The Angle orthodontist; Jul 2017; vol. 87 (no. 4); p. 603-609

### Publication Type(s): Journal Article

**Abstract:**OBJECTIVETo compare the mixed dentition incisor and molar overjet, severity of contraction of the dental arch, and the sagittal molar relationship on the cleft side vs the noncleft side in children with repaired complete unilateral cleft of the lip and palate (UCLP). **[ABSTRACT EDITED]** 

### Longitudinal dental maturation of children with complete unilateral cleft lip and palate: A casecontrol cohort study.

Author(s): Tan, E L Y; Kuek, M C; Wong, H C; Yow, M

Source: Orthodontics & craniofacial research; Jul 2017

### Publication Type(s): Journal Article

**Abstract:**OBJECTIVESMany reports suggest that children with cleft lip and palate (CLP) have delayed dental development and asymmetrical timing of tooth-pair formation. We aimed to investigate the dental maturation of permanent teeth in children with complete unilateral CLP (UCLP) and compare the findings with non-CLP children.SETTING AND SAMPLE POPULATIONThis case-control study used 115 radiographs of children with complete UCLP and controls (non-CLP children matched on age, gender and ethnicity) from a hospital-based dental clinic in Singapore. **[ABSTRACT EDITED]** 

### Are people with an orofacial cleft at a higher risk of dental caries? A systematic review and metaanalysis.

Author(s): Worth, V; Perry, R; Ireland, T; Wills, A K; Sandy, J; Ness, A

Source: British dental journal; Jul 2017; vol. 223 (no. 1); p. 37-47

Publication Type(s): Journal Article

**Abstract:**Objective To establish whether children born with an orofacial cleft have a higher risk of dental caries than individuals without cleft. **[ABSTRACT EDITED]** 

### Does the recording medium influence phonetic transcription of cleft palate speech?

Author(s): Klintö, Kristina; Lohmander, Anette

**Source:** International journal of language & communication disorders; Jul 2017; vol. 52 (no. 4); p. 440-449

### Publication Type(s): Journal Article

**Abstract:**BACKGROUNDIn recent years, analyses of cleft palate speech based on phonetic transcriptions have become common. However, the results vary considerably among different studies. It cannot be excluded that differences in assessment methodology, including the recording medium, influence the results.AIMSTo compare phonetic transcriptions from audio and audio/video recordings of cleft palate speech by means of outcomes of per cent correct consonants (PCC) and differences in consonant transcriptions. **[ABSTRACT EDITED]** 

### Dynamic Cleft Maxillary Orthopedics and Periosteoplasty: 25 Patients-25 Years.

Author(s): Lukash, Frederick N; Shikowitz-Behr, Lauren B; Schwartz, Michael; Tuminelli, Frank

Source: Annals of plastic surgery; Jul 2017

### Publication Type(s): Journal Article

**Abstract:**In 1985 this cleft team, dissatisfied with the treatment and results from cleft lip and palate repair, began a longitudinal long-term study using dynamic maxillary orthopedics and periosteoplasty as was originally described by Drs Millard and Latham. All cases were carefully documented through adolescence, including clinical assessments, orthodontic, radiographic, and cephalometric analyses. In 1998, in this journal, we published our data on 35 complete unilateral and 10 complete bilateral cleft patients. At that time facial growth was following normal cephalometric patterns. Crossbites were dental and treated with orthodontics. There was radiologic evidence of bone within the alveolus with elimination of the oronasal fistula, and facial aesthetics revealed soft faded scars and balanced noses.That publication was a preliminary study with the intent to provide long-term results when full facial growth was achieved. This article reports on 25 patients from the initial cohort (20 unilateral and 5 bilateral) that we were able to closely follow up for 25 years, with the same clinical team, making it the longest study of its kind. **[ABSTRACT EDITED]** 

### Canine Eruption After Secondary Alveolar Bone Graft in Unilateral Cleft Lip and Palate Patients.

Author(s): Vellone, Valentino; Cirignaco, Giulio; Cavarretta, Bruno; Cascone, Piero

Source: The Journal of craniofacial surgery; Jul 2017; vol. 28 (no. 5); p. 1206-1210

### Publication Type(s): Journal Article

**Abstract:**PURPOSEThe aim of this article is to analyze dental abnormalities in unilateral cleft lip and palate patients by focusing on the role of the secondary alveolar bone graft (SABG) surgery and its outcomes on canine eruption/inclusion. **[ABSTRACT EDITED]** 

## The Americleft Project: Plaster Dental Casts Versus Digital Images for GOSLON Yardstick Ratings When Used in Intercenter Comparisons.

Author(s): Long, Ross E; Daskalogiannakis, John; Mercado, Ana M; Hathaway, Ronald R;

Source: The Journal of craniofacial surgery; Jul 2017; vol. 28 (no. 5); p. 1269-1273

### Publication Type(s): Journal Article

**Abstract:**The purpose of this investigation was to determine reliability and validity of GOSLON Yardstick ratings using plaster casts versus photo galleries of digital images in actual intercenter comparisons. **[ABSTRACT EDITED]** 

### Development of a paediatric head voxel model database for dosimetric applications.

Author(s): Stratis, Andreas; Touyz, Nathan; Zhang, Guozhi; Jacobs, Reinhilde; Bogaerts, Ria; Bosmans, Hilde; DIMITRA Project partners

Source: The British journal of radiology; Jul 2017; p. 20170051

Publication Type(s): Journal Article

**Abstract:**OBJECTIVESTo develop a database of paediatric head voxel models intended for Monte Carlo (MC) dosimetric applications. **[ABSTRACT EDITED]** 

Iatrogenic Rhinoliths: Exercise Caution When Undertaking Palatal-Dental Impressions in the Cleft Patient With an Incompetent Palate...Hempel S, Maggard-Gibbons M, Nguyen DK, Dawes AJ, Miake-Lye 1. Beroes JM, Booth MJ. Miles JN, Shannian R, Shekelle PG. Wrong-site surgery, retained surgical items, and surgical fires: a systematic review of surgical never events. JAMA Surg. 2015;150:796-805

**Author(s):** Swan, Marc C.; Popat, Sandip; Kidner, Giles; Sibley, Jane; Goodacre, Timothy E. E. **Source:** Cleft Palate-Craniofacial Journal; Jul 2017; vol. 54 (no. 4); p. 487-488

Publication Type(s): Academic Journal

### Periodontal disease and antibiotics

The efficacy of proanthocyanidins and secnidazole in the treatment of chronic periodontitis after scaling and root planing therapy

Author(s): Li M.; Li R.; Jin Q.; Pang J.; Xu Z.

Source: Journal of Biological Regulators and Homeostatic Agents; 2017; vol. 31 (no. 1); p. 93-97

Publication Type(s): Article

Available in full text at Journal of biological regulators and homeostatic agents [J Biol Regul Homeost Agents] NLMUID: 8809253 - from EBSCOhost

**Abstract:**The aim of this study is to evaluate the clinical and microbiological effect of the systemic antibiotic therapy of proanthocyanidins and secnidazole on periodontitis. **[ABSTRACT EDITED]** 

## Localized alveolar bone disease prior to dental extraction in cancer patients treated with antiresorptives: An early stage of osteonecrosis of the jaw (ONJ)?

Author(s): Papadopoulou E.; Nicolatou-Galitis O.; Vardas E.; Konstantina-Eleni A.; Galitis D.; Kouri M.

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

Publication Type(s): Conference Abstract

**Abstract**:Introduction Growing data, from animal experimental studies and clinical observations, have implicated periodontal infectious disease in the development of ONJ in patients, treated with antiresorptive agents. Objectives To assess the role of localized periodontal alveolar bone disease (LABD) in ONJ, prior to dental extraction in cancer patients. Pain, swelling, pu-rulence and localized tooth mobility defined LABD. **[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. **[ABSTRACT EDITED]** 

## 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. **[ABSTRACT EDITED]** 

## Antibiotic administration alleviates the aggravating effect of orthodontic force on ligature-induced experimental periodontitis bone loss in mice.

Author(s): Shi, J.; Liu, Z.; Kawai, T.; Zhou, Y.; Han, X.

Source: Journal of Periodontal Research; Aug 2017; vol. 52 (no. 4); p. 725-733

### Publication Type(s): Academic Journal

**Abstract:**Background and Objectives It is recognized that orthodontic force (OF) has an aggravating effect on the progression of destructive periodontitis if periodontitis have not been well controlled. However, the underlying mechanism is not completely clear. This study was to investigate the effect of antibiotic administration on OF-aggravated, ligature-induced experimental periodontitis in mice. **[ABSTRACT EDITED]** 

### INSUFFICIENT EVIDENCE TO CLAIM THAT PHOTODYNAMIC THERAPY AS AN ADJUNCT TO SCALING AND ROOT PLANING IMPROVES PERIODONTAL PARAMETERS COMPARED WITH ADJUNCTIVE ANTIBIOTICS.

Author(s): Devji, Tahira
Source: Journal of the American Dental Association (JADA); Aug 2017; vol. 148 (no. 8)
Publication Type(s): Academic Journal

## Commentary: Targeting Underlying Biologic Mechanisms in Selecting Adjunctive Therapies to Improve Periodontal Treatment in Smokers: A Commentary.

Author(s): Geisinger, Maria L; Geurs, Nicolaas C; Ogdon, Dorothy; Reddy, Michael S Source: Journal of periodontology; Aug 2017; vol. 88 (no. 8); p. 703-710

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

**Abstract:**Despite well-established evidence that cigarette smoking is the largest modifiable risk factor for periodontal disease and has many deleterious health effects, treatment of periodontal disease in smokers remains a challenge of periodontal therapy. A recent meta-analysis revealed that adjunctive use of local delivery of antimicrobials, but not systemic antibiotic usage, with non-surgical periodontal therapy resulted in improvement in clinical periodontal parameters. Further evaluation of the current literature reveals that host modulation therapy may also result in clinical benefit in smokers. These findings may be tied to the underlying pathophysiology of periodontal disease progression in smokers and suggest that focused therapies that target known mechanisms of action are critical to the success of proposed treatments.

## The Effect of Nonsurgical Periodontal Therapy on HNP1-3 Level in Gingival Crevicular Fluid of Chronic Periodontitis Patients.

Author(s): Dolińska, Ewa; Skurska, Anna; Pietruska, Małgorzata; Dymicka-Piekarska, Violetta;

Source: Archivum immunologiae et therapiae experimentalis; Aug 2017; vol. 65 (no. 4); p. 355-361

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

**Abstract:**The rich bacterial flora of oral cavity is controlled by innate immune response, including antibacterial peptides and among them human neutrophil peptides 1-3 (HNP1-3). The knowledge of the involvement of HNPs in innate and acquired immunity of the periodontium is fragmentary. The aim of the study was to assess alterations in HNP1-3 levels in the gingival crevicular fluid (GCF) of chronic periodontitis patients before and after nonsurgical periodontal therapy. **[ABSTRACT EDITED]** 

#### Antibiotic prescription for endodontic infections: a survey of Brazilian Endodontists.

Author(s): Bolfoni, M R; Pappen, F G; Pereira-Cenci, T; Jacinto, R C

Source: International endodontic journal; Jul 2017

Publication Type(s): Journal Article

**Abstract:**AIMTo investigate antibiotic prescribing habits reported by Brazilian Endodontists in specific clinical situations. **[ABSTRACT EDITED]** 

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

Author(s): Sweidan, Alaa; Chollet-Krugler, Marylene; Sauvager, Aurelie; van de Weghe, Pierre

Source: Fitoterapia; Jul 2017

Publication Type(s): Journal Article

**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.

Mechanical and antibiotic periodontal therapies may be no different in terms of tooth loss in patients with chronic periodontitis.

Author(s): Devji, TahiraSource: Journal of the American Dental Association (1939); Jul 2017Publication Type(s): Journal Article

### 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; Jul 2017; vol. 83 (no. 14)

### 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 it is 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. Though much has been learned about A. actinomycetemcomitans since its initial discovery, we lack insight into a fundamental aspect of its basic biology, as we do not know the full set of genes that it requires for viability (the essential genome). Furthermore, research on A. actinomycetemcomitans is hampered by the field's lack of a mutant collection. To address these gaps, we used rapid transposon mutant sequencing (Tn-seq) to define the essential genomes of two strains of A. actinomycetemcomitans, revealing a core set of 319 genes. **[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; Jul 2017

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]** 

#### Antimicrobial effect of blue light using Porphyromonas gingivalis pigment.

**Author(s):** Yoshida, Ayaka; Sasaki, Haruka; Toyama, Toshizo; Araki, Mitsunori; Fujioka, Jun; Tsukiyama, Koichi; Hamada, Nobushiro; Yoshino, Fumihiko

Source: Scientific reports; Jul 2017; vol. 7 (no. 1); p. 5225

Publication Type(s): Journal Article

Available in full text at Scientific Reports - from ProQuest

**Abstract:**The development of antibiotics cannot keep up with the speed of resistance acquired by microorganisms. Recently, the development of antimicrobial photodynamic therapy (aPDT) has been a necessary antimicrobial strategy against antibiotic resistance. Among the wide variety of bacteria found in the oral flora, Porphyromonas gingivalis (P. gingivalis) is one of the etiological agents of periodontal disease. aPDT has been studied for periodontal disease, but has risks of cytotoxicity to normal stained tissue. In this study, we performed aPDT using protoporphyrin IX (PpIX), an intracellular pigment of P. gingivalis, without an external photosensitizer. We confirmed singlet oxygen generation by PpIX in a blue-light irradiation intensity-dependent manner. We discovered that blue-light irradiation on P. gingivalis is potentially bactericidal. **[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; Jul 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]** 

## Antibiotic therapy as an adjunct to scaling and root planing in smokers: a systematic review and meta-analysis.

Author(s): Assem, Naida Zanini; Alves, Márcio Luiz Ferro; Lopes, Alessandra Barreto;

Source: Brazilian oral research; Jul 2017; vol. 31; p. e67

Publication Type(s): Journal Article

**Abstract:**The aim of this study was to perform a systematic review and meta-analysis to examine the effect of systemic antibiotics in the periodontal treatment of smokers. **[ABSTRACT EDITED]** 

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

Author(s): Furtos, Gabriel; Rivero, Guadalupe; Rapuntean, Sorin; Abraham, Gustavo A

**Source:** Journal of biomedical materials research. Part B, Applied biomaterials; Jul 2017; vol. 105 (no. 5); p. 966-976

### Publication Type(s): Journal Article

**Abstract**:Electrospun nanocomposite matrices based on poly(ε-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.

### Characteristics of teeth referred to a public dental specialist clinic in endodontics.

Author(s): Sebring, D; Dimenäs, H; Engstrand, S; Kvist, T

Source: International endodontic journal; Jul 2017; vol. 50 (no. 7); p. 629-635

### Publication Type(s): Journal Article

**Abstract:**AIMTo investigate referrals to a specialist clinic in endodontics in relation to previously root filled teeth and to determine how many of these teeth had a history of symptoms and the extent to which antibiotics were prescribed. **[ABSTRACT EDITED]** 

## 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]** 

## 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. **[ABSTRACT EDITED]** 

### Dental-related head and neck oncology

## 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]** 

### Oral Complications at Six Months after Radiation Therapy for Head and Neck Cancer.

**Author(s):** Lalla, Rajesh V; Treister, Nathaniel; Sollecito, Thomas; Schmidt, Brian; Patton, Lauren L; Mohammadi, Kusha; Hodges, James S; Brennan, Michael T; OraRad Study Group

Source: Oral diseases; Jul 2017

Publication Type(s): Journal Article

**Abstract:**OBJECTIVEExamine oral complications 6 months after modern radiation therapy (RT) for head and neck cancer (HNC). **[ABSTRACT EDITED]** 

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

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

Source: Acta oncologica (Stockholm, Sweden); Jun 2017; vol. 56 (no. 6); p. 874-878

Publication Type(s): Journal Article

**Abstract:**BACKGROUNDDelineation 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]** 

## 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]** 

### Survivorship needs after head and neck cancer treatment

Author(s): Berkowitz C.; Allen D.H.; Tenhover J.; Zullig L.L.; Fischer J.E.; Pollak K.I.; Hicks M.R.; Hillson J.V.; Koontz B.F.

Source: Journal of Clinical Oncology; Jun 2017; vol. 35 (no. 15)

Publication Type(s): Conference Abstract

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

**Abstract:**Background: Head and neck cancer (HNC) survivors experience significant sequelae of treatment, including longterm physical side effects and ongoing surveillance for recurrence and secondary malignancy. Given the complicated trajectory of HNC survivors, survivorship care plans educating patients and their caregivers about treatment and recovery may be beneficial. However, little is known about patients' knowledge gaps related to survivor issues. **[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. **[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.

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]

## Long-term impact of head and neck cancer (HNC) and treatment on financial distress and employment of hnc survivors

Author(s): Wulff-Burchfield E.; Bonnet K.; Schlundt D.; Dietrich M.S.; Castellanos E.; Murphy B.A.

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

Publication Type(s): Conference Abstract

**Abstract:**Introduction Increasing HNC survival highlights the importance of understanding late biopsychosocial outcomes. Financial and occupational topics in HNC survivors represent a knowledge gap. Objectives Perform qualitative analysis to identify financial and occupational themes/impacts of HNC/treatment on survivors' financial health. **[ABSTRACT EDITED]** 

## Interest in smoking cessation and quit rates associated with a clinical tobacco intervention (CTI) offered near start of treatment inhead and neck cancer patients

Author(s): Conlon M.; Meigs M.; Santi S.; Caswell J.; Saunders D.

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

Publication Type(s): Conference Abstract

**Abstract:**Introduction Offering smoking cessation opportunities during cancer treatment is important and may improve patient quality of life and outcomes from care. Objectives This research study used a prospective cohort design set within a dental oncology program at a regional cancer centre in Sudbury, Ontario, Canada, to assess smoking characteristics, interest in, and outcomes associated with receiving a chairside Clinical Tobacco Intervention (CTI) near time of treatment for head and neck cancer. Quit rates, use of medications, and ongoing cravings and urges were assessed at 6 and 12 months. **[ABSTRACT EDITED]** 

### **Dental implants**

## Assessment of Parathyroid Hormone Serum Level as a Predictor for Bone Condition Around Dental Implants.

Author(s): Hadrowicz, Piotr; Hadrowicz, Joanna; Kozakiewicz, Marcin; Gesing, Adam

Source: The International journal of oral & maxillofacial implants; ; vol. 32 (no. 4); p. e207

### Publication Type(s): Journal Article

**Abstract:**PURPOSEThe aim of this prospective study was to evaluate parathyroid hormone serum level as a potential single factor of bone metabolism around dental implants. **[ABSTRACT EDITED]** 

## Survival Rate of Dental Implants in Patients with History of Periodontal Disease: A Retrospective Cohort Study.

Author(s): Correia, Francisco; Gouveia, Sónia; Felino, António Campos; Costa, Ana Lemos; Almeida,

Source: The International journal of oral & maxillofacial implants; ; vol. 32 (no. 4); p. 927-934

### Publication Type(s): Journal Article

**Abstract:**PURPOSETo evaluate the differences between the survival rates of implants placed in patients with no history of periodontal disease (NP) and in patients with a history of chronic periodontal disease (CP). **[ABSTRACT EDITED]** 

## Preoperative Anxiety and Its Influence on Patient and Surgeon Satisfaction in Patients Receiving Dental Implant Surgeries Performed Under Intravenous Conscious Sedation.

Author(s): Bovaira, Maite; Herrero Babiloni, Alberto; Jovaní, María; Peñarrocha-Diago, Miguel;

Source: The International journal of oral & maxillofacial implants; ; vol. 32 (no. 4); p. 912-918

### Publication Type(s): Journal Article

**Abstract**:PURPOSEThe aims of this study were to evaluate the relationship of age, sex, and type and duration of the surgery with preoperative anxiety in patients undergoing dental implant surgeries under intravenous conscious sedation, and to assess preoperative anxiety association with the postoperative satisfaction of both the patient and surgeon. **[ABSTRACT EDITED]** 

### Clinical Performance of Dental Implants with a Moderately Rough (TiUnite) Surface: A Meta-Analysis of Prospective Clinical Studies.

Author(s): Karl, Matthias; Albrektsson, Tomas

Source: The International journal of oral & maxillofacial implants; ; vol. 32 (no. 4); p. 717-734

Publication Type(s): Journal Article

**Abstract:**PURPOSEA moderately rough anodized titanium implant surface (TiUnite) was introduced in 2000. This review and meta-analysis aimed to assess implant survival and marginal bone level (MBL) changes documented in the literature. **[ABSTRACT EDITED]** 

## 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, Jölide;

Source: The International journal of periodontics & restorative dentistry; ; vol. 37 (no. 4); p. 491-497

Publication Type(s): Journal Article

PubMedID: 28609493

**Abstract:**The aim of this study was to present the use of retroauricular full-thickness skin grafts in vestibuloplasty surgeries for dental implant rehabilitation in vascularized fibula grafts. Two patients underwent mandibular reconstruction with vascularized fibula grafts due to mandibular gunshot injuries. **[ABSTRACT EDITED]** 

### Comparison of Clinical, Radiographic, and Immunologic Inflammatory Parameters Around Dental Implants with Cement-Retained and Screw-Retained Restorations: A 5-Year Prospective Cohort Study in Men.

Author(s): Al Amri, Mohammad D; Al-Rasheed, Abdulaziz S; Al-Kheraif, Abdulaziz A; Alfadda, Sara A

Source: The International journal of prosthodontics; ; vol. 30 (no. 4); p. 384-389

### Publication Type(s): Journal Article

**Abstract:**PURPOSETo compare bleeding on probing (BoP), probing depth (PD;  $\geq$  4 mm), radiographic (peri-implant crestal bone loss [CBL]), and immunologic inflammatory (interleukin-1beta [IL-1 $\beta$ ] and matrix metalloproteinase-9 [MMP-9]) parameters around dental implants with cement-retained (CR) and screw-retained (SR) implant-supported crowns. **[ABSTRACT EDITED]** 

## A New Model to Study Fatigue in Dental Implants Based on Probabilistic Finite Elements and Cumulative Damage Model

Author(s): Prados-Privado M.; Rojo R.; Prados-Frutos J.C.; Bea J.A.; Gehrke S.A.; Calvo-Guirado J.L.

Source: Applied Bionics and Biomechanics; 2017; vol. 2017

### Publication Type(s): Article

**Abstract:**The aim of this study was to predict the fatigue life of two different connections of a dental implant as in load transfer to bone. **[ABSTRACT EDITED]** 

### The influence of titanium dental implant surface on osseointegration: A review

Author(s): Rotim Z.; Boras V.V.; Rogulj A.A.; Susic M.; Gabric D.; Ivica P.

**Source:** Research Journal of Pharmaceutical, Biological and Chemical Sciences; 2017; vol. 8 (no. 4); p. 798-804

### Publication Type(s): Review

**Abstract**:Succes of dental implants relies amongst other factors, on implant surface as it is known that it helps osseointegration. An important challenge in the field of implantology is development of implant coatings which mimic native bone and therefore increase bone in growth. **[ABSTRACT EDITED]** 

### Local complications of dental implant treatment

Author(s): Matej A.; Zeljko R.; Boras V.; Ana A.-R.; Gabric D.; Terlevic D.; Pelivan I.

**Source:** Research Journal of Pharmaceutical, Biological and Chemical Sciences; 2017; vol. 8 (no. 4); p. 792-797

### Publication Type(s): Article

**Abstract:**Many factors can be connected to unsuccessful implant treatment. Factors can be divided in two categories - local and systemic. From previous data it is known that local factors such as periodontal disease, insufficient oral hygiene and smoking have the biggest influence at unsuccessful implant treatment. Furthermore, some implant factors such as diameter, length and type of implant might affect the success of this treatment. Furthermore, place of implant insertion in the bone and consequential load can influence the success of implant treatment. Therefore, the aim of this study was to review existing literature regarding local complications in dental implant treatment. **[ABSTRACT EDITED]** 

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

Author(s): Rossi M.C.; Bezerra F.J.B.; Silva R.A.; Crulhas B.P.; Fernandes C.J.C.; Nascimento A.S.

Source: Journal of Biomedical Materials Research - Part A; 2017

Publication Type(s): Article In Press

**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. First, we determined the concentration of titanium (Ti)-containing conditioned medium and found that it was 2-fold increased (pCopyright © 2017 Wiley Periodicals, Inc.

## 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; 2017

### Publication Type(s): Article In Press

**Abstract**:Background/Purpose: Trigeminocardiac reflex (TCR) is a clinical phenomenon that manifests as s sudden onset of hemodynamic perturbations. TCR has been reported in craniomaxillofacial 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 possibly of occurrence of TCR in patients during dental implant surgery. **[ABSTRACT EDITED]** 

### Dental implants in patients with osteoporosis: A systematic review with meta-analysis

Author(s): de Medeiros F.C.F.L.; Kudo G.A.H.; Leme B.G.; Saraiva P.P.; Santiago Junior J.F.; Verri F.R.

Source: International Journal of Oral and Maxillofacial Surgery; 2017

### Publication Type(s): Article In Press

**Abstract:**There is currently no consensus regarding the survival rate of osseointegrated implants in patients with osteoporosis. A systematic review with meta-analysis was performed to evaluate the survival rate of implants in such patients. **[ABSTRACT EDITED]** 

## The application of a delayed expansion technique for horizontal alveolar ridge augmentation in dental implantation

Author(s): Li X.; Xu P.; Liu S.; Xu X.

Source: International Journal of Oral and Maxillofacial Surgery; 2017

Publication Type(s): Article In Press

**Abstract:**The aim of this study was to evaluate the application of delayed expansion of the alveolar ridge in dental implantation. **[ABSTRACT EDITED]** 

### Analysis of the abutment-implant platform gap in internal hex dental implants

Author(s): Cardozo R.; Araya J.; Gonzalez O.; Carrasco J.; Zenteno C.; Olate S.; Navarro P.

Source: Biomedical Research (India); 2017; vol. 28 (no. 8); p. 3336-3339

#### Publication Type(s): Article

**Abstract**:The aim of this research was to identify the abutment-implant gap using 20 N or 30 N torques for the abutment. A descriptive study was designed using 3 internal hex implant systems from four different companies; the implants were manipulated in a usual way, installing the respective prosthetic abutment in each platform using 20 N/cm2 and 30 N/cm2 torque. **[ABSTRACT EDITED]** 

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

Author(s): de Mello J.S.; Faot F.; Correa G.; Chagas Junior O.L.

Source: International Journal of Oral and Maxillofacial Surgery; 2017

Publication Type(s): Article In Press

**Abstract:**A systematic review was conducted to evaluate the success rate of dental implants placed in the incisive canal region and the complications related to this procedure. **[ABSTRACT EDITED]** 

## Analgesic efficacy and safety of transdermal and oral diclofenac in postoperative pain management following dental implant placement.

Author(s): Raja Rajeswari, S; Gowda, Triveni; Kumar, Tarun; Mehta, Dhoom S; Arya, Kanchan

Source: General dentistry; 2017; vol. 65 (no. 4); p. 69-74

Publication Type(s): Journal Article

**Abstract:**The aim of this study was to compare the efficacy and safety of transdermal and oral routes of diclofenac for postoperative pain management in patients undergoing dental implant placement. **[ABSTRACT EDITED]** 

## Impacts of 3D bone-to- implant contact and implant diameter on primary stability of dental implant

Author(s): Hsu J.-T.; Shen Y.-W.; Fuh L.-J.; Huang H.-L.; Kuo C.-W.; Wang R.-T.

Source: Journal of the Formosan Medical Association; Aug 2017; vol. 116 (no. 8); p. 582-590

### Publication Type(s): Article

**Abstract:**Background/Purpose This study investigated the effects of three three-dimensional (3D) bone-to-implant contact (BIC) parameters-potential BIC area (pBICA), BIC area (BICA), and 3D BIC percentage (3D BIC%; defined as BICA divided by pBICA)-in relation to the implant diameter on primary implant stability, as well as their correlations were also evaluated. **[ABSTRACT EDITED]** 

## Dental implants modified with drug releasing titania nanotubes: therapeutic potential and developmental challenges

Author(s): Gulati K.; Ivanovski S.

Source: Expert Opinion on Drug Delivery; Aug 2017; vol. 14 (no. 8); p. 1009-1024

### Publication Type(s): Review

**Abstract:**Introduction: The transmucosal nature of dental implants presents a unique therapeutic challenge, requiring not only rapid establishment and subsequent maintenance of osseointegration, but also the formation of resilient soft tissue integration. Key challenges in achieving long-term success are sub-optimal bone integration in compromised bone conditions and impaired transmucosal tissue integration in the presence of a persistent oral microbial biofilm. These challenges can be targeted by employing a drug-releasing implant modification such as TiO2 nanotubes (TNTs), engineered on titanium surfaces via electrochemical anodization. Areas covered: This review focuses on applications of TNT-based dental implants towards achieving optimal therapeutic efficacy. **[ABSTRACT EDITED]** 

## On the bulk degradation of yttria-stabilized nanocrystalline zirconia dental implant abutments: an electron backscatter diffraction study

Author(s): Ocelik V.; De Hosson J.T.M.; Schepke U.; Rasoul H.H.; Cune M.S.

Source: Journal of Materials Science: Materials in Medicine; Aug 2017; vol. 28 (no. 8)

### Publication Type(s): Article

**Abstract:** Abstract: Degradation of yttria-stabilized zirconia dental implants abutments due to the tetragonal to monoclinic phase transformation was studied in detail by microstructural characterization using Electron Back Scatter Diffraction (EBSD). The amount and distribution of the monoclinic phase, the grain-size distribution and crystallographic orientations between tetragonal and monoclinic crystals in 3 mol.% yttria-stabilized polycrystalline zirconia (3Y-TZP) were determined in two different types of nano-crystalline dental abutments, even for grains smaller than 400 nm. An important and novel conclusion is that no substantial bulk degradation of 3Y-TZP dental implant abutments was detected after 1 year of clinical use. Graphical abstract: [InlineMediaObject not available: see fulltext.].Copyright © 2017, The Author(s).

## Time course of surface characteristics of alkali- and heat-treated titanium dental implants during vacuum storage

Author(s): Kamo M.; Kyomoto M.; Miyaji F.

**Source:** Journal of Biomedical Materials Research - Part B Applied Biomaterials; Aug 2017; vol. 105 (no. 6); p. 1453-1460

### Publication Type(s): Article

**Abstract:**Current efforts to shorten the healing times of life-long dental implants and prevent their fouling by organic impurities have focused on using surface-modification treatments and alternative packaging, respectively. In this study, we investigated the time course of the surface characteristics, including the wettability, a protein-adsorption and apatite-formation abilities, of alkali- and heat-treated (AH-treated) Ti samples during storage in vacuum over a period of 52 weeks. **[ABSTRACT EDITED]** 

### Comparative analysis of stress in a new proposal of dental implants.

Author(s): Valente, Mariana Lima da Costa; de Castro, Denise Tornavoi; Macedo, Ana Paula;

**Source:** Materials science & engineering. C, Materials for biological applications; Aug 2017; vol. 77 ; p. 360-365

Publication Type(s): Journal Article

**Abstract:**The purpose of this study was to compare, through photoelastic analysis, the stress distribution around conventional and modified external hexagon (EH) and morse taper (MT) dental implant connections. **[ABSTRACT EDITED]** 

## Failure of Osseointegrated Dental Implant After Alveolar Nerve Transposition: A Report of an Unusual Complication and Surgical Management.

Author(s): da Costa Ribeiro, Renato; Barbosa Luna, Anibal Henrique; Sverzut, Cássio Edvard;

Source: Implant dentistry; Aug 2017; vol. 26 (no. 4); p. 645-648

Publication Type(s): Journal Article

**Abstract:**PURPOSETo describe an unusual case of mandibular fracture after osseointegrated dental implant removal placed after inferior alveolar nerve transposition. **[ABSTRACT EDITED]** 

### 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; Yamalik, Nermin; Güncü, Güliz N; Tözüm, Tolga F; El, Hakan;

Source: Implant dentistry; Aug 2017; vol. 26 (no. 4); p. 581-591

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]** 

### Freehand Versus Guided Surgery: Factors Influencing Accuracy of Dental Implant Placement.

Author(s): Choi, William; Nguyen, Bao-Chau; Doan, Andrew; Girod, Sabine; Gaudilliere, Brice;

Source: Implant dentistry; Aug 2017; vol. 26 (no. 4); p. 500-509

### Publication Type(s): Journal Article

**Abstract:**INTRODUCTIONPatient anatomy, practitioner experience, and surgical approach are all factors that influence implant accuracy. However, the relative importance of each factor is poorly understood. The present study aimed to identify which factors most critically determine implant accuracy to aid the practitioner in case selection for guided versus freehand surgery. **[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

**Source:** Dental materials : official publication of the Academy of Dental Materials; Aug 2017; vol. 33 (no. 8); p. e317

### 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]** 

## Influence of surface modified dental implant abutments on connective tissue attachment: A systematic review.

Author(s): Blázquez-Hinarejos, Mónica; Ayuso-Montero, Raúl; Jané-Salas, Enric; López-López, José

Source: Archives of oral biology; Aug 2017; vol. 80 ; p. 185-192

Publication Type(s): Journal Article Review

PubMedID: 28456116

**Abstract:**OBJECTIVEDetermine whether surface modified prosthetic abutments for dental implants influence connective tissue attachment to the implant-abutment system. **[ABSTRACT EDITED]** 

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

Author(s): Deeb G.; Wheeler B.; Jones M.; Carrico C.; Laskin D.; Deeb J.G.

Source: Journal of Oral and Maxillofacial Surgery; Jul 2017; vol. 75 (no. 7); p. 1387-1391

### Publication Type(s): Article

**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]** 

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

Author(s): Hindy A.; Tabatabaei F.; Farahmand F.

Source: Lasers in Medical Science; Jul 2017; vol. 32 (no. 5); p. 1197-1206

### Publication Type(s): 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. **[ABSTRACT EDITED]** 

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

Author(s): Iaculli F.; Piattelli A.; Di Filippo E.S.; Mancinelli R.; Fulle S.

**Source:** Journal of Biomedical Materials Research - Part B Applied Biomaterials; Jul 2017; vol. 105 (no. 5); p. 953-965

### Publication Type(s): 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]** 

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 A.; Botzenhart U.; Seeliger J.; Biocev P.; Heinemann F.; Dominiak M.

Source: Annals of Anatomy; Jul 2017; vol. 212 ; p. 61-68

### Publication Type(s): 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]** 

## Nanoparticle mediated PPARgamma gene delivery on dental implants improves osseointegration via mitochondrial biogenesis in diabetes mellitus rat model

Author(s): Lee Y.-H.; Kim J.-S.; Kim J.-E.; Yi H.-K.; Lee M.-H.; Jeon J.-G.; Park I.-S.

**Source:** Nanomedicine: Nanotechnology, Biology, and Medicine; Jul 2017; vol. 13 (no. 5); p. 1821-1832

### Publication Type(s): Article

**Abstract:**Diabetes mellitus (DM) has a detrimental effect on osseointegration, stability and longevity of implants due to osteoporosis. In this study, PPARgamma-loaded dental implants were investigated for the improvement of osseointegration and peri-implantitis. **[ABSTRACT EDITED]** 

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

Author(s): Insua A.; Monje A.; Wang H.-L.; Miron R.J.

Source: Journal of Biomedical Materials Research - Part A; Jul 2017; vol. 105 (no. 7); p. 2075-2089

### Publication Type(s): 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]** 

### 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): 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. **[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 D.; Bergamo E.T.P.; Fardin V.P.; Coelho P.G.; Bonfante E.A.

Source: Journal of the Mechanical Behavior of Biomedical Materials; Jul 2017; vol. 71 ; p. 244-249

Publication Type(s): Article

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

### Selective serotonin reuptake inhibitors and dental implant failure-A significant concern in elders?

Author(s): Gupta, Bhumija; Acharya, Aneesha; Pelekos, Georgios; Gopalakrishnan, Dharmarajan;

Source: Gerodontology; Jul 2017

Publication Type(s): Journal Article

**Abstract:**OBJECTIVEDepression is a significantly prevalent health concern in geriatric populations. Selective serotonin reuptake inhibitor drugs (SSRI) are the most commonly prescribed antidepressant agents, with increasing rates of prescription. The present report aimed to present a concise review of the current understanding regarding SSRI effects on bone and dental implant outcomes. **[ABSTRACT EDITED]** 

## Design and validation of a DNA-microarray for phylogenetic analysis of bacterial communities in different oral samples and dental implants.

Author(s): Parolin, Carola; Giordani, Barbara; Ñahui Palomino, Rogers Alberto; Biagi, Elena;

Source: Scientific reports; Jul 2017; vol. 7 (no. 1); p. 6280

Publication Type(s): Journal Article

Available in full text at Scientific Reports - from ProQuest

**Abstract:**The quali-quantitative characterization of the oral microbiota is crucial for an exhaustive knowledge of the oral ecology and the modifications of the microbial composition that occur during periodontal pathologies. In this study, we designed and validated a new phylogenetic DNA-microarray (OralArray) to quickly and reliably characterize the most representative bacterial groups that colonize the oral cavity. **[ABSTRACT EDITED]** 

## Effect of implantoplasty on fracture resistance and surface roughness of standard diameter dental implants.

Author(s): Costa-Berenguer, Xavier; García-García, Marta; Sánchez-Torres, Alba; Sanz-Alonso, Mariano; Figueiredo, Rui; Valmaseda-Castellón, Eduard

Source: Clinical oral implants research; Jul 2017

Publication Type(s): Journal Article

**Abstract**:OBJECTIVETo assess the effect of implantoplasty on the fracture resistance, surface roughness, and macroscopic morphology of standard diameter (4.1 mm) external connection dental implants. **[ABSTRACT EDITED]** 

## Mechanical strength and fracture point of a dental implant under certification conditions: A numerical approach by finite element analysis.

Author(s): de la Rosa Castolo, Guillermo; Guevara Perez, Sonia V; Arnoux, Pierre-Jean;

Source: The Journal of prosthetic dentistry; Jul 2017

Publication Type(s): Journal Article

**Abstract:**STATEMENT OF PROBLEMImplant prosthodontics provides high-quality outcomes thanks to recent technological developments and certification procedures such as International Organization for Standardization (ISO) standard 14801. However, these certification tests are costly, and the result is highly uncertain as the influence of design variables (materials and structure) is still

unknown. The design process could be significantly improved if the influence of design parameters were identified.PURPOSEThe purpose of this in vitro study was to use finite element analysis (FEA) to assess the influence of design parameters on the mechanical performance of an implant in regard to testing conditions of ISO 14801 standard. **[ABSTRACT EDITED]** 

## Mechanical performance of cement- and screw-retained all-ceramic single crowns on dental implants.

Author(s): Obermeier, Matthias; Ristow, Oliver; Erdelt, Kurt; Beuer, Florian

Source: Clinical oral investigations; Jul 2017

Publication Type(s): Journal Article

**Abstract:**OBJECTIVESThis in-vitro study was performed to compare the contact wear, fracture strength and failure mode of implant-supported all-ceramic single crowns manufactured with various fabrication and fixation concepts. **[ABSTRACT EDITED]** 

## Buccal bone dimensions and aesthetic outcome at maxillary incisors replaced by conventional dental implants. A case series with a 5-year follow-up.

Author(s): Menchini Fabris, G B; Marconcini, S; Barone, A; Velasco Ortega, E; Bressan, E; Balleri, P

Source: Journal of biological regulators and homeostatic agents; Jul 2017; vol. 31 (no. 1)

### Publication Type(s): Journal Article

## Available in full text at Journal of biological regulators and homeostatic agents [J Biol Regul Homeost Agents] NLMUID: 8809253 - from EBSCOhost

**Abstract:**In the aesthetic field, successful replacement of a tooth with a dental implant requires blend and harmony within the existing dentition. The influence of the dimension of buccal bone at implant sites on aesthetic outcomes and the relation between buccal bone horizontal and vertical dimensions are unclear. The aim of the present study is to investigate the correlation between buccal bone thickness, buccal bone level and aesthetic outcome in conventionally placed implants – placed five or more years previously – supporting single maxillary incisors. **[ABSTRACT EDITED]** 

## A technique for immediately restoring single dental implants with a CAD-CAM implant-supported crown milled from a poly(methyl methacrylate) block.

Author(s): Proussaefs, Periklis; AlHelal, Abdulaziz

Source: The Journal of prosthetic dentistry; Jul 2017

Publication Type(s): Journal Article

**Abstract:**This technique is used when a single dental implant is placed. A stent made of autopolymerized acrylic resin was used to transfer the implant position to the laboratory. Once the implant position was transferred, the stone cast was scanned, and a computer-aided design and computer-aided manufacturing (CAD-CAM) interim implant-supported crown was milled from a poly(methyl methacrylate) (PMMA) block. **[ABSTRACT EDITED]** 

### In vitro effects of dental cements on hard and soft tissues associated with dental implants.

Author(s): Rodriguez, Lucas C; Saba, Juliana N; Chung, Kwok-Hung; Wadhwani, Chandur; Rodrigues, Danieli C

Source: The Journal of prosthetic dentistry; Jul 2017; vol. 118 (no. 1); p. 31-35

Publication Type(s): Journal Article

**Abstract:**STATEMENT OF PROBLEMDental cements for cement-retained restorations are often chosen based on clinician preference for the product's material properties, mixing process, delivery mechanism, or viscosity. The composition of dental cement may play a significant role in the proliferation or inhibition of different bacterial strains associated with peri-implant disease, and the effect of dental cements on host cellular proliferation may provide further insight into appropriate cement material selection.PURPOSEThe purpose of this in vitro study was to investigate the cellular host response of bone cells (osteoblasts) and soft tissue cells (gingival fibroblasts) to dental cements. [ABSTRACT EDITED]

## Novel bioactive tetracycline-containing electrospun polymer fibers as a potential antibacterial dental implant coating.

Author(s): Shahi, R G; Albuquerque, M T P; Münchow, E A; Blanchard, S B; Gregory, R L; Bottino, M C

Source: Odontology; Jul 2017; vol. 105 (no. 3); p. 354-363

### Publication Type(s): Journal Article

**Abstract:**The purpose of this investigation was to determine the ability of tetracycline-containing fibers to inhibit biofilm formation of peri-implantitis-associated pathogens [i.e., Porphyromonas gingivalis (Pg), Fusobacterium nucleatum (Fn), Prevotella intermedia (Pi), and Aggregatibacter actinomycetemcomitans (**[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]** 

### No evidence that education influences willingness to receive dental implants in older adults.

Author(s): Brignardello-Petersen, Romina

Source: Journal of the American Dental Association (1939); Jul 2017; vol. 148 (no. 7); p. e91

Publication Type(s): Journal Article

## Minimization of dental implant diameter and length according to bone quality determined by finite element analysis and optimized calculation.

Author(s): Ueda, Nana; Takayama, Yoshiyuki; Yokoyama, Atsuro

Source: Journal of prosthodontic research; Jul 2017; vol. 61 (no. 3); p. 324-332

Publication Type(s): Journal Article

**Abstract:**PURPOSEThe purpose of this study was to investigate the influences of bone quality and implant size on the maximum equivalent elastic strain (MES) in peri-implant bone using finite element (FE) analysis, and to minimize implant size via optimized calculation based on MES. **[ABSTRACT EDITED]** 

# 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, Kai; Wang, Feng; Huang, Wei; Wu, Yiqun

**Source:** Journal of oral and maxillofacial surgery : official journal of the American Association of Oral and Maxillofacial Surgeons; Jul 2017

Publication Type(s): Journal Article

**Abstract**:PURPOSEThe 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]** 

## Accuracy of linear measurements around dental implants by means of cone beam computed tomography with different exposure parameters.

Author(s): Bohner, Lauren O L; Tortamano, Pedro; Marotti, Juliana

Source: Dento maxillo facial radiology; Jul 2017; vol. 46 (no. 5); p. 20160377

Publication Type(s): Journal Article

**Abstract**:OBJECTIVESThe aim of this study was to determine the accuracy of linear measurements around dental implants when using CBCT unit devices presenting different exposure parameters. **[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]** 

## Bruxism and dental implant treatment complications: a retrospective comparative study of 98 bruxer patients and a matched group.

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

Source: Clinical oral implants research; Jul 2017; vol. 28 (no. 7); p. e1

Publication Type(s): Journal Article

**Abstract:**OBJECTIVESTo analyze the complications of dental implant treatment in a group of patients with bruxism in comparison with a matched group of non-bruxers. **[ABSTRACT EDITED]** 

## In Vitro Laser Treatment Platform Construction with Dental Implant Thread Surface on Bacterial Adhesion for Peri-Implantitis.

Author(s): Kuo, Hsien-Nan; Mei, Hsiang-I; Liu, Tung-Kuan; Liu, Tse-Ying; Lo, Lun-Jou; Lin, Chun-Li

Source: BioMed Research International; Jul 2017 ; p. 1-7

Publication Type(s): Academic Journal

Available in full text at BioMed Research International - from EBSCOhost

Available in full text at BioMed research international [Biomed Res Int] NLMUID: 101600173 - from EBSCOhost

**Abstract:**This study constructs a standard in vitro laser treatment platform with dental implant thread surface on bacterial adhesion for peri-implantitis at different tooth positions. **[ABSTRACT EDITED]** 

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July 2017, Volume 223, Issue 2

### **Evidence-Based Dentistry**

Volume 18, Issue 2 (2017)

### International Journal of Oral and Maxillofacial Implants

July/ August 2017, Volume 32, Issue 4

### **International Journal of Prosthodontics**

July/ August 2017, Volume 30, Issue 4

### **Journal of Clinical Periodontology**

July 2017, Volume 44, Issue 7

### Exercise: Creating a search strategy

**Scenario**: A 64 year old obese male who has tried many ways to lose weight presents with a newspaper article about 'fat-blazer' (chitosan). He asks for your advice.

### 1. What would your PICO format be?

Population/problem	
Intervention/indicator	
Comparator	
Outcome	

### 2. What would your research question be?

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PICO: P = obese patients; I = chitosan; C = placebo; O = decrease weight
Research question: In obese patients, does chitosan, compared to a placebo, decrease weight?



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