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Saudi Society of Periodontology

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Issue. 2 **July 2020**

Dear collogues,

Here we meet again at the second issue of our newsletter which is now in your hand hoping that it will convey you as before, interesting information.

In this issue, we included a new section pertaining the recent scientific achievements from our professional community.

I would like to acknowledge all my collogues who contributed to this effort in preparation, writing, editing or providing the essential information. Along with the rest of the other sections, we hope that the material we present you today will bring us more closer together.

Dr. Adnan Almaghlouth

CASE REPORT

PROTOCOL TO IMPROVE ESTHETICS BY TREATING GINGIVAL PIGMENTATION AND EXCESSIVE GINGIVAL DISPLAY

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INTRODUCTION

Smile is a basic determinant of esthetics and attractiveness. The harmony and symmetry of an esthetic smile is defined by several aspects which include; tooth position, size, shape, and color. In addition, other factors related to gingival tissue appearance such as color and amount of gingival tissue display and finally, framing of upper and lower lips including thickness and shape is essential factor to complete esthetically accepted dental smile [1]. Gingiva is considered the most frequently pigmented tissue in the oral cavity [2]. Gingival pigmentation is defined as the discoloration of the gingival tissue due to a variety of lesions and conditions associated with either endogenous or exogenous etiologic features [3]. It may range from physiologic reasons (e.g. racial pigmentation) or related to use of application of several chemicals (e.g. nicotine induced pigmentation), or manifestations of systemic illnesses (e.g. Addison's disease), or malignant neoplasms (e.g. melanoma and Kaposi's sarcoma). It is essential to understand the cause of a mucosal pigmentation and understand whether this pigmentation is reversible or not before planning the treatment of such lesion [4]. Furthermore, the normal smile is that with 1-2 mm of gingival display from the lower border of upper lip to the gingival margin of maxillary central incisors. Gingival display of 2-3mm is mostly considered acceptable however more than 4 mm can be defined as excessive gingival display (EGD) that may be not esthetic for most of patients[1]. EGD is a mucogingival deformity characterized by the display of the whole length of maxillary central incisors crowns with a continuous band of gingiva during smiling or speaking [5]. EGD is one of the most common esthetic chief complaint in dental clinic which have a negative impact on the patient esthetically, psychologically, as well as socially. EGD can be related to several etiologies and causes, hence, it should be diagnosed properly to be corrected by several approaches accordingly[5]. Etiologies of EGD includes altered passive eruption, vertical maxillary excess, hyper mobile lips, plaque or drug induced gingival enlargement, short upper lip and asymmetrical upper lip [6-8]. The present case provides a step by step protocol to treat cases associated with combination of factors affecting the esthetics of a smile from periodontal aspect including pigmentation and EGD and will further explain how to improve esthetics as well as maintaining periodontal health status outcomes.

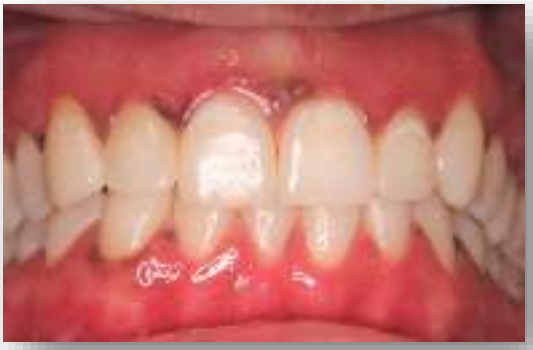


Fig 1. Pre-operative Intra-oral view

Fig 2. Two months after Gingivoplasty

Overview

A 38-year-old female patient reported with a chief complaint of small dark pigmentations that are scattered on her gingiva as well as a gummy smile. The pigmentations were noticed from the patient for more than a year and EGD was present almost through her whole entire adult life. The patient's medical history was non relevant, and she does not use any type of tobacco products. Patient mental status was classified as Philosophical [9]. Upon extra-oral examination, patient presented with symmetrical facial proportion, TMJ and lymphatic nodes within normal limits. Intraoral examination revealed good oral hygiene (OHI-S 0.8) with several pigmented areas around the attached and marginal gingiva. Gingival display was around 8 mm upon smiling illustrating a subclass III of lip hypermobility [8]. The patient had no need for any of orthodontic treatment nor active treatment was done and the periapical as well as Panoramic radiographic images showed alveolar bone 2-3 mm apical from the CEJ with disproportionate gingival margins indicating a type 1-A of altered passive eruption [10]. (*Fig. 1*)

Fig 3. Two months after gingivectomy. Note the gingival display during smiling

Surgical protocol

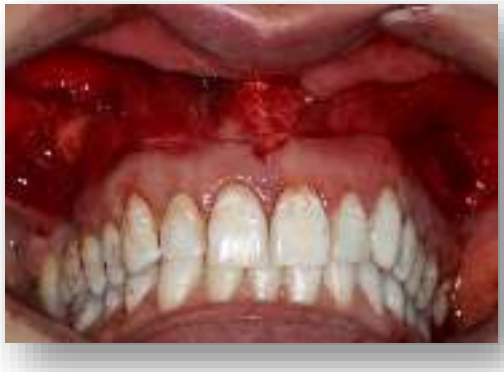
A consent form was prepared explaining all aspects of treatment and possible complications after thorough discussion with the patient. Surgical treatment that was divided into three sequential procedures separated by at least two months: Depigmentation, Gingivectomy, and Lip repositioning.

Anesthesia

For all procedures, Topical application of Benzocaine followed by local anesthesia administration of 2% Xylocaine, 1/100, 000 Epinephrine as the labial and lingual infiltration, amount of carpools ranged between1-2 carpools based on procedure done.

A-Gingivoplasty (Depigmentation)

Procedure was carried out using a medium sized round diamond bur with a high-speed hand piece for gingivoplasty to remove the full epithelial layer in a uniform thickness to assure in attempt to remove the deepest layer of epithelium (*Stratum Basale*) which contains the melanocytes[11]. This was performed in a parallel shaving motion with light pressure extending from #14 to 24 and around the gingival margins and papilla. No periodontal dressing was applied to surgery area and patient was instructed to take ibuprofen 400mg when needed and was scheduled for 1 week follow up post-surgery which revealed un-eventful healing. (*Fig. 2*)



B-Gingivectomy (Soft tissue Crown Lengthening)

After two months, the patient was reevaluated and prepped for her second chief complaint (EGD). Proper teeth proportion were evaluated and bone sounding along with radiographic interpretation was done to evaluate the level of cemento-enamel junction (CEJ) from crestal bone level. Furthermore, length and width of anterior teeth was taken to calculate the amount necessary for gingivectomy. Using the golden proportion, tooth width percentage in the area between 78% - 80% was the targeted as well as shape and position of Zenith [10]. Based on findings, Gingivectomy was indicated as a soft tissue crown lengthening for #12-22. The procedure was carried out on teeth #12-22 using a #15 C blade with an external beveled incision at 45° angle an average of 0.5mm of tissue was excised. Patient was given post-operative instructions and ibuprofen 400mg *t.i.d.* for three days as an analgesic without any periodontal dressing. Lastly, one week follow up revealed uneventful healing. (*Fig.3*)

Fig 4-6 Lip reposition surgery.
Fig 6. Site of muscle dissection prior to periosteal sutures

C- Lip repositioning

During the two months follow up after gingivectomy. The patient was satisfied with her results. However, she was more conscious about her EGD and her thin lip appearance when smiling. The surgery was carried out by calculating the amount of gingival display during smiling on each tooth (average 8 mm) and then doubling this number to achieve the amount of tissue to be removed. The excised tissue would begin coronally from the muco-gingival junction and extend apically about 16mm on the labial mucosa. Using the number 15 blade a split thickness incision was made from molar to molar on the mesial maxillary area. Following the tissue band excision, the levator labii muscles on the corner of the mouth around the canines were cut horizontally and periosteal simple interrupted 5-0 (Vicryl, *Ethicon Inc. USA*) resorbable sutures was made in attempt to stabilize the dislocated muscle in new position (*Fig. 6*). The remaining surgical sites was sutured with (Proline, *Ethicon Inc. USA*)) non-resorbable sutures 5-0 and 6-0 as interlocking continuous sutures followed by 8 simple interrupted sutures in attempt for obtaining proper closer of wound's site. The patient was given post-operative instructions and ibuprofen 400mg *t.i.d.* for three days as an analgesic as well as prednisolone 25mg for 5 days. A surgical tape (*Micropore, 3M. USA*) was placed on patient's upper philtrum in order to help patient to minimize upper lip movement during the first three post-operative days. (*Fig. 4-7)*

The patient was seen every week for 3 weeks post-surgery. At two weeks follow up, non-resorbable sutures were removed. Furthermore, she was seen for recall intervals in 3 and 7 months reporting with satisfaction and stable results with little if any relapse on her smile. The patient is still under regular follow ups and reported satisfaction with the outcomes. (*Fig.8 & 9*)

Fig. 7. Immediate post-operative

Fig. 8. Two months follow up

Fig 9. Displaying the smile after 7 months following lip reposition surgery

Discussion and Conclusion

Proper assessment and reaching correct diagnosis is the essential key to treat esthetic cases from periodontal and restorative aspects. In such cases, it is crucial to exclude any need for other disciplines at assessments stage such as surgery, orthodontic treatment or restorative treatment. Additionally, it should be noted that it is crucial to understand that certain procedures including the ones performed in the present case might have a chance of relapse. Therefore, It is essential to be aware of percentages and causes of possible relapse and discuss this possibility with the patient. This will further enhance long term predictability and by that patient's satisfaction. Finally, efforts have been done in all series of surgeries to reduce this possible relapse including; proper removal of all epithelial layer during gingivoplasty, proper evaluation of CEJ-crestal bone distance and selecting correct classification of the case before attempting crown lengthening and finally, a modification including releasing of levator labii muscles and adding periosteal sutures during lip-repositioning surgery.

References

1. Jensen J, Joss A, Lang NP. The smile line of different ethnic groups in relation to age and gender. Acta Med Dent Helv 1999;4:38-46.
2. Dummett CO, Barrens G. Pigmentation of oral tissues: a review of literature.J Periodontol 1967;38:360e78.
3.Kauzman A, Pavone M, Blanas N, Bradley G. Pigmented lesions of the oral cavity: review, differential diagnosis of case presentation. J Can Dent Assoc 2004;70:682e3.
4.Ship Jonathan A, Greenberg Martin S, Glick Michael, editors. Burket's oral medicine: pigmented lesions of the oral mucosa. tenth ed. Hamilton Ontario: BC Decker Inc; 2003.
5.Andijani RI, Tatakis DN. Hypermobile upper lip is highly prevalent among patients seeking treatment for gummy smile. J Periodontol. 2019;90(3):256-262. doi:10.1002/JPER.18-0468
6. Tjan AHL, Miller GD, The JGP. Some esthetic factors in a smile. J Prosthet Dent. 1984. doi:10.1016/S0022-3913(84)80097-9
7. Garber DA, Salama MA. The aesthetic smile: Diagnosis and treatment. Periodontol 2000. 1996. doi:10.1111/j.1600-0757.1996.tb00179.x
8. Bhola M, Fairbairn P, Kolhatkar S, Chu S, Morris T, de Campos M. LipStaT: The Lip Stabilization Technique— Indications and Guidelines for Case Selection and Classification of Excessive Gingival Display. Int J Periodontics Restorative Dent. 2015. doi:10.11607/prd.2059
9. Winkler, Sheldon. "House mental classification system of denture patients: The contribution of Milus M. House." *Journal of Oral Implantology* 31.6 (2005): 301-303.
10. Coslet JG, Vanarsdall R, Weisgold A. Diagnosis and classification of delayed passive eruption of the dentogingival junction in the adult. *Alpha Omegan*. 1977;70(3):24-28.
11. Groeger, S., & Meyle, J. (2019). Oral mucosal epithelial cells. *Frontiers in immunology*, *10*.
12. Excessive gingival display - etiology, diagnosis and treatment modalities. Br Dent J. 2010. doi:10.1038/sj.bdj.2010.129
13. Al Jasser R. Proper diagnosis and management of dental smile esthetics from periodontal perspective: Literature review. Saudi J Oral Dent Res 2019;4:350-354.
14. Chu SJ. A biometric approach to predictable treatment of clinical crown discrepancies. Pract Proced Aesthet Dent. 2007;19(7):401-410.

The Saudi Society of Periodontology is pleased to welcome our new periodontists and wish them all the best

Dr. Ady Ahmed Azhari
Current working place: King Abdulaziz University, Faculty of Dentistry
Postgraduate degree: Saint Louis University Center for Advanced Dental Education
Bachelor's degree: King Abdulaziz University, Faculty of Dentistry

Dr. Nujud Zaid Alamry
Current working place: College of Dentistry - Princess Nourah Bint Abdulrahman University
Postgraduate degree: University of Connecticut Health Center, School of Dental Medicine Boston University Henry M. Goldman School of Dental Medicine
Bachelor's degree: King Saud University

Dr. Hajer Ali Aldulaijan
Current working place: College of Dentistry- King Saud University
Postgraduate degree: State University at Buffalo
Bachelor's degree: King Saud University

Dr. Esra Muntasser Faden
Current working place: King Abdulaziz University, Faculty of Dentistry
Postgraduate degree: Tufts University School of Dental Medicine, Boston
Bachelor's degree: King Abdulaziz University, Faculty of Dentistry

Dr. Mohammed Fareed Felemban
Current working place: Taif University
Postgraduate degree: University of Oklahoma Health Science Center
Bachelor's degree: King Abdulaziz University, Faculty of Dentistry

Dr. Weam Khalid Alshenibr
Current working place: Part time instructor at Princess Nourah Bint Abdulrahman University
Postgraduate degree: Boston University Henry M. Goldman School of Dental Medicine
Bachelor's degree: Riyadh Elm University

Welcome

The Saudi Society of Periodontology is pleased to welcome our new periodontists and wish them all the best

Dr. Saqer Meshal Almutairi
Current working place: King Saud Medical City
Postgraduate degree: New York University College of Dentistry
Bachelor's degree: Misr University for Science and Technology

Dr. Sultan Abdullah Alghaithi
Current working place: National guard health affairs, King Abdulaziz Medical City- Jeddah
Postgraduate degree: University of Pennsylvania
Bachelor's degree: King Abdulaziz University, Faculty of Dentistry

Dr. Shatha S. Alfayez
Current working place: Riyadh Specialized Dental Center- MOH
Postgraduate degree: New York University College of Dentistry
Bachelor's degree: Riyadh Elm University

Dr. Arwa Muthana Al Hugail
Current working place: Imam Abdulrahman Al Faisal Hospital - Dhahran, NGHA
Postgraduate degree: University of Texas Health San Antonio
Bachelor's degree: Riyadh Elm University

Dr. Majed Khalid Alshehri
Current working place: King Saud bin Abdulaziz University for Health Sciences
Postgraduate degree: Boston University Henry M. Goldman School of Dental Medicine
Bachelor's degree: King Saud University

Dr. Ali Fahad Al-Jabbar Alqahtani
Current working place: King Khalid University
Postgraduate degree: Loma Linda University, Fellow of Royal College of Dentists in Canada in Periodontics
Bachelor's degree: King Khalid University

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One of the community health services' of The Saudi Society of Periodontology was " An Hour for Your Oral health" talk .The talk was held live on instagram with more than 5000 viewers over 11 episodes

The presenters:

Dr. Nabeeh Al-Qahtani

Dr. Amal Jamjoom

Dr. Ammar Al-Marghalani

and the preparation team included:

Dr. Khadeeja Maleh
Dr. Sharifah Al-Amer
Dr. Aisha Al-Qureshey

We hosted Saudi doctors to discuss multiple topics about the general and oral health.
The episodes were all recorded and uploaded on the Society's YouTube channel.
looking forward to achieving the desired goal.

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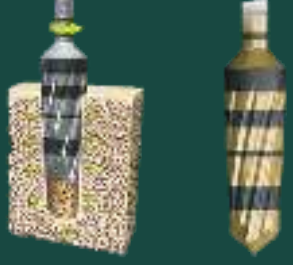
Implant Dentistry Practice and Eligibility in Saudi Arabia (Part 1)

Implant dentistry practice is governed globally by specific guidelines and measures to ensure safety of the patients. Surgical placement of dental implants requires extensive training to address the placement and manage post-operative complications and failures that may arise. As dental implant treatment is not covered by insurance in most countries, care should be taken in granting privilege to place the implants to avoid malpractice.
The privileging for dental implants varies between countries and is governed by dental bodies. The following table shows the comparison between dental implant placement eligibility between Saudi Arabia and USA.

Association	Dental Implant Privileging	Qualification	Resources
Saudi Council for health specialties (SCFHS)	General dentists Periodontists Prosthodontists Oral surgeons Maxillofacial surgeons	Fellowship in dental implants by SCFHS • Additional licensing in dental implants prosthodontic aspect is awarded to dentists classified into the rank of registrar and consultant in the field of oral surgery, maxillofacial surgery, and periodontology after completing structured training in the prosthodontic aspects of dental implants for (100 hours) from one-multiple accredited course(s) or institutions accredited by the commission. They shall submit evidence that they completed the treatment of (15) cases from an authorized training institution (excepting commercial companies) and they should pass a clinical and theoretical assessment conducted by the commission. • Additional licensing in the surgical aspects of dental implants shall be awarded to dentists classified into the rank of registrar and consultant in the field of prosthodontics or restorative dentistry after completing structured training in the surgical aspects of dental implants for (100 hours) from one-multiple accredited course-s or institutions accredited by the commission. They shall submit evidence that they completed the treatment of (15) cases from an authorized training institution (excepting commercial companies), and they should pass a clinical and theoretical assessment conducted by the commission. • Additional licensing in dental implants, prosthodontics, and surgical aspects shall be awarded to GP dentists after completing a structured training program in both aspects of dental implants for a period of not less than one year.	https://www.scfhs.org.sa/en/registration/ClassAndRegister/Reregister/Documents/Professional%20Classification%20manual%20for%20Health%20Practitioners.pdf
American Dental Association (ADA)	Oral and Maxillofacial Surgeons and Periodontists are the only surgical specialists recognized by the American Dental Association (ADA)		http://thedentalimplantguide.org/dental-implants/myths-misconceptions/doctor-qualifications/ https://www.ada.org/en/ncrdscb/dental-specialties/recognized-national-dental-specialty-organizations http://thedentalimplantguide.org/does-a-dental-implant-specialist-have-specific-credentials-and-expertise/

American Academy for Implant Dentistry (AAID)	Graduate of Dental Implantology Program Board certified specialist in oral and maxillofacial surgery, periodontics or prosthodontics Non-Board-certified specialist General Dentist	AAID Credential: Associate Fellow • Licensed dentist • Completed at least 300 hours of postdoctoral or continuing education related to implant dentistry • 1 or more years of experience in the practice of implant dentistry • Experienced in surgical placement of dental implants and/or the replacement of teeth • Passed in-depth written and oral/case examinations demonstrating competency in implant dentistry • Demonstrated competency in implant dentistry through 5 standardized cases and the presentation and in-depth discussion of one's own patient cases, including the successful use of dental implants to restore a single tooth, multiple teeth and a full set of teeth (arch) • Attended at least one of every three consecutive AAID annual scientific meetings AAID Credential: Fellow • Licensed dentist AND Associate Fellow of AAID or Diplomate of ABOI/ID • Completed at least 400 hours of postdoctoral or continuing education related to implant dentistry • 5 or more years of experience in the practice of implant dentistry • Knowledgeable in all phases of implant dentistry, including both the surgical placement of dental implants and the replacement of teeth • Passed in-depth oral/case examination demonstrating competency in implant dentistry • Demonstrated competency in all phases of implant dentistry cases, through 5 standardized cases and in-depth discussion of 10 of one's own patient cases, including placing dental implants in challenging situations and in patients with jawbone deficiencies, among others • Attended at least one of every three consecutive AAID annual scientific conferences ABOI/ID: Certified Diplomate • Multiple Routes to become a Diplomate: 1. Graduate of Dental Implantology Program a minimum of 2 years in length 2. Board certified specialist in oral and maxillofacial surgery, periodontics or prosthodontics 3. Non-Board-certified specialist	https://www.aaid.com/patients_and_public/Find_a_Dentist.html https://www.aaid-implant.org/aaid-credentials/training-experience-and-credentials/

		4. General Dentist 5. Associate Fellow or Fellow of the AAID • General dentists must have a minimum of 670 continuing education hours, 300 of which are part of a continuum of training in implantology, Associate Fellows and Fellows are required to have 570 continuing education hours, 300 of which are part of a continuum of training in implantology • 7 or more years of experience in the practice of implant dentistry • The examination measures competency in all phases of implant dentistry. Candidates rotate through a series of stations, 4 of which are standardized cases and 2 are where candidates defend cases that they submit to the Board • Graduates of a two-year implantology program and Board-certified specialists are exempt from taking the written examination. All other routes must pass an in-depth written and oral examination for the exception of Fellows of the AAID • Demonstrated competency in all phases of implant dentistry cases, through 5 standardized cases and in-depth discussion of 10 of one's own patient cases, including placing dental implants in challenging situations and in patients with jawbone deficiencies, among others	



The Densah® Bur technology is based on a novel biomechanical bone preparation technique called "*osseodensification*." Unlike traditional dental drilling techniques, osseodensification does not excavate bone tissue. Rather, bone tissue is simultaneously compacted and auto-grafted in outwardly expanding directions from the osteotomy. When a Densah® Bur is rotated at high speed in a reversed, non-cutting direction with steady external irrigation, a strong and dense layer of bone tissue is formed along the walls and base of the osteotomy. Dense compacted bone tissue produces stronger purchase for your favorite dental implant and may facilitate faster healing.

Biomechanical[1] as well as histological[2,3,4] validation studies of the osseodensification and the procedure utilizing the Densah® Bur technology concluded that, in porcine tibia and Sheep Illiac Crest, osseodensification may facilitate bone expansion, increase implant stability and create a densification layer around the preparation site by compacting and autografting bone particles along the entire depth of the osteotomy.

Ridge Expansion with Modified Ridge Split

Create intra-bony trough in narrow ridge < 4 mm

Use the Densah® Bur in small increments

Oversize the osteotomy to be slightly wider than the

Place an implant with a diameter that is equal or slightly larger than the initial ridge width.

Perform hard & soft tissue veneer contour graft to develop tissue thickness around implants

Experts opinions:

I used Versah bur for the last 5 years. I found it great instrument for internal sinus elevation and osseodensification especially in sites that need bone graft.

Dr. Raed AlRowis
Assistant Professor, Periodontology department
College of Dentistry, King Saud University

Densah Drills are a must have tool in implantology armamentarium. They are versatile and ensure primary stability in most of the cases.

Dr.Mohamad Alsaggaf
Assistant Professor in Periodontology at King Abdulaziz University
Part Time consultant Samaya dental clinic, Jeddah city

For contacts:
SIM DRUG STORE LLC
+971 56 496 5580

References:

1. Huwais, Salah, and Eric G. Meyer. "A Novel Osseous Densification Approach in Implant Osteotomy Preparation to Increase Biomechanical Primary Stability, Bone Mineral Density, and Bone-to-Implant Contact." International Journal of Oral & Maxillofacial Implants 32.1 (2017).
2. Trisi, Paolo, et al. "New osseodensification implant site preparation method to increase bone density in low-density bone: in vivo evaluation in sheep." Implant dentistry 25.1 (2016): 24.
3. Lahens, Bradley, et al. "Biomechanical and histologic basis of osseodensification drilling for endosteal implant placement in low density bone. An experimental study in sheep." Journal of the Mechanical Behavior of Biomedical Materials 63 (2016): 56-65.
4. Lopez, Christopher D., et al. "Osseodensification for enhancement of spinal surgical hardware fixation." Journal of the mechanical behavior of biomedical materials 69 (2017): 275-281.
5. Densah® Bur & Versah® Guided Surgery System Instructions for Use, at: https://versah.com/wp-content/uploads/2019/10/Digital-IFU-REV19-1.pdf

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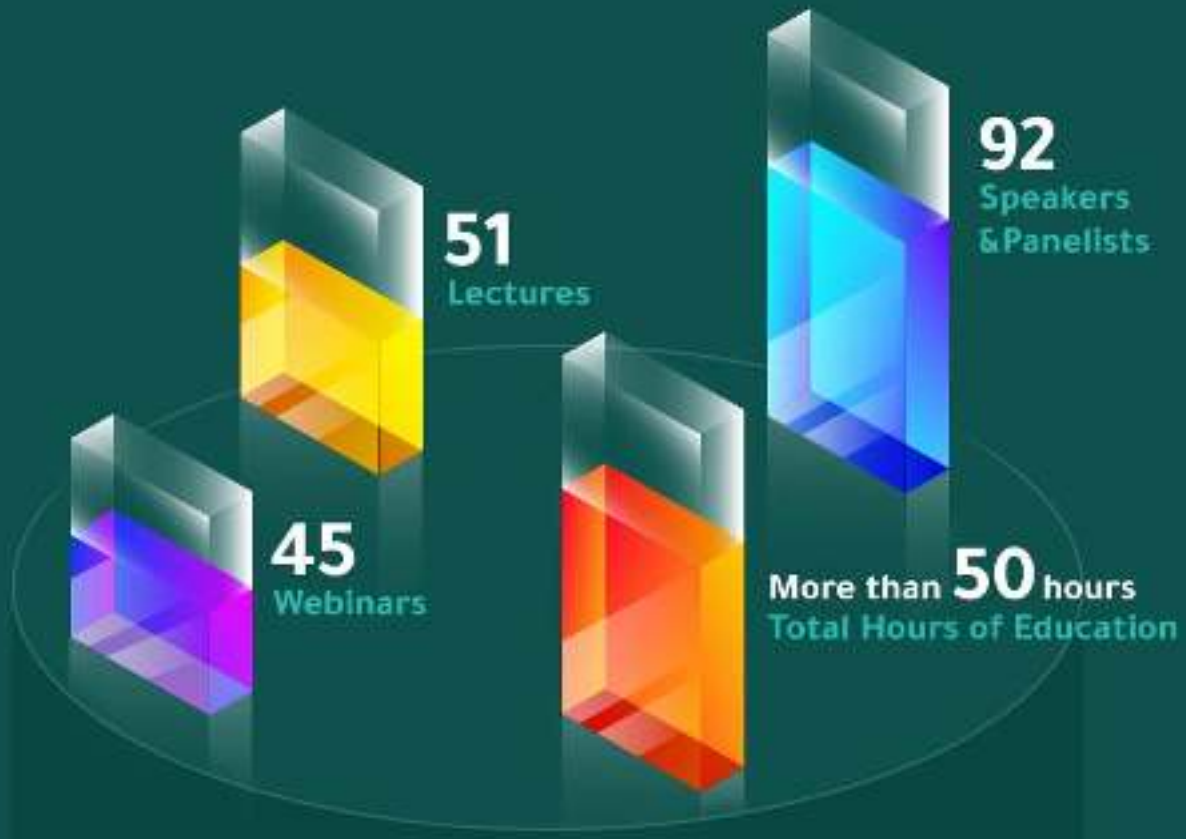

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SSP Community Scientific Output

22 indexed publications from Saudi periodontists were noted from mid of 2019 to mid 2020. Here, the SSP would like to highlight this achievement.

Name	Institution	Publication title	Link to the journal
Dr. Khalid Alharthi	Ibn Sina National College	Correlative Assessment of Interdental and Interradicular Bone Loss in Horizontal and Vertical Bone Defects in Chronic Periodontitis: A Clinical and Radiographic Study	https://www.ijlpr.com/admin/php/uploads/519_pdf.pdf
Dr. Adnan Almaghlouth	King Fahad Medical City	Impact of Oral and Oropharyngeal Cancer Diagnosis on Smoking Cessation Patients and Cohabiting Smokers	https://pubmed.ncbi.nlm.nih.gov/31768167/
Dr.Munerah Binshabaib	Princess Nourah Bint Abdulrahman University	Antimicrobial efficacy of 0.8% Hyaluronic Acid and 0.2% Chlorhexidine against Porphyromonas gingivalis strains: An in-vitro study	https://www.pjms.org.pk/index.php/pjms/article/view/1456
Dr. Shatha ALHarthi	Princess Nourah Bint Abdulrahman University	Association between time since quitting smoking and periodontitis in former smokers in the national health and nutrition examination surveys (NHANES) 2009 to 2012	https://www.ncbi.nlm.nih.gov/pubmed/30102767
Dr. Zuhair Natto	King Abdulaziz University		
Dr. Reham Al Jasser	King Saud University	One-year rotational relapse frequency following conventional circumferential supracrestal fiberotomy	https://www.researchgate.net/publication/339238462_One-year_rotational_relapse_frequency_following_conventional_circumferential_supracrestal_fiberotomy
		Xenogeneic collagen matrix versus connective tissue graft for the treatment of multiple gingival recessions: A systematic review and meta-analysis	https://www.researchgate.net/publication/334132500_Xenogeneic_collagen_matrix_versus_connective_tissue_graft_for_the_treatment_of_multiple_gingival_recessions_A_systematic_review_and_meta-analysis
		An Evidence-Based Update on the Molecular Mechanisms Underlying Periodontal Diseases	https://www.researchgate.net/publication/341702792_An_Evidence-Based_Update_on_the_Molecular_Mechanisms_Underlying_Periodontal_Diseases
Dr. Mazen Ameen	Umm Al Qura University	Evaluation of cardiac biomarkers in smokers and non-smokers with chronic periodontitis	https://ijhs.org.sa/index.php/journal/article/view/4814
Dr. Ahmed Al-Majid	University of Zurich-Switzerland & King Faisal Specialist Hospital- Saudi Arabia	Impact of Interdental Brush Shape on Interpapillary Cleaning Efficacy - A Clinical Trial	https://pubmed.ncbi.nlm.nih.gov/32404897/?from_term=Schmidlin+PR+Al-majid&from_pos=3
		Treatment of Peri-Implant Mucositis with Repeated Application of Chlorhexidine Chips or Gel During Supportive Therapy - A Randomized Clinical Trial	https://pubmed.ncbi.nlm.nih.gov/31835899/?from_term=Schmidlin+PR+Al-majid&from_pos=1

Name	Institution	Publication title	Link to the journal
Dr. Zuhair Natto	King Abdulaziz University, Faculty of Dentistry	Flapless Extraction and Immediate Implant Placed into a Mandibular Molar Site: A Clinical Case Report and 5-Year Follow-Up	https://meridian.allenpress.com/joi/article-abstract/45/2/159/365040/
		Peri-Implantitis and Peri-Implant Mucositis Case Definitions in Dental Research: A Systematic Assessment	https://meridian.allenpress.com/joi/article-abstract/45/2/127/365028/Peri-Implantitis-and-Peri-Implant-Mucositis-Case?redirectedFrom=fulltext
		Soft Tissue changes after using Collagen Matrix Seal or Collagen Sponge with Allograft in Ridge Preservation: A Randomized Controlled Volumetric Study	https://meridian.allenpress.com/joi/article-abstract/doi/10.1563/aaid-joi-D-19-00080/432314/Soft-Tissue-changes-after-using-Collagen-Matrix?redirectedFrom=fulltext
		Double Full-Arch Fixed Implant-Supported Prostheses: Outcomes and Complications after a Mean Follow-Up of 5 Years	https://onlinelibrary.wiley.com/doi/abs/10.1111/jopr.13040
		Technical Complications and Prosthesis Survival Rates with Implant-Supported Fixed Complete Dental Prostheses: A Retrospective Study With 1- To 12-Year Follow-Up	https://onlinelibrary.wiley.com/doi/full/10.1111/jopr.13119
		Digital Versus Conventional Full-Arch Implant Impressions: A Prospective Study on 16 Edentulous Maxillae	https://onlinelibrary.wiley.com/doi/abs/10.1111/jopr.13162
		Complications and Survival Rates of 55 Metal-Ceramic Implant-Supported Fixed Complete-Arch Prostheses: A Cohort Study with Mean 5-year Follow-Up	https://www.thejpd.org/article/S0022-3913(19)30145-3/fulltext
		Methodological Quality Assessment of Meta-analyses and Systematic Reviews of the Relationship Between Periodontal and Systemic Diseases	https://www.sciencedirect.com/science/article/abs/pii/S153233821830294X?via%3Dihub
		A Comparison Between Primary and Secondary Flap Coverage in Ridge Preservation Procedures: A Pilot Randomized Controlled Clinical Trial	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6720364/
		Annual Alveolar Bone Loss in Older Adults Taking Oral Bisphosphonate: A Retrospective Cohort Study	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6881984/
		Prevalence of Periodontitis and Alveolar Bone Loss in a Patient Population at Harvard School of Dental Medicine	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6873420
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