



Poster Session

Anthony H. Melcher Award

CLINICAL CASE COMPETITION

Coordinator: **Marco Clementini**

Evaluating Committee:

Francesco de Sanctis, Simone Fabrizi, Davide Guglielmi

The Poster Session will be organized on Friday the 27th as follows:

- Poster set-up time: 08:30_{am}-10:45_{am} on Friday, May the 27th on the panel showing the assigned code.

The Evaluating Committee will view the posters and enter into lively and challenging discussions with the poster presenters, as follows:

- **C1-C6**: during the coffee break time on Friday the 27th from 11.05_{am} to 11.40_{am}
- **C7-C23**: during the lunch break time on Friday the 27th from 01.20_{pm} to 02.30_{pm}
- **C24-C29**: during the coffee break time on Friday the 27th from 03.50_{pm} to 04.30_{pm}.

C1 Esthetic crown lengthening with full mouth rehabilitation

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Background

Esthetic crown lengthening aims to reduce excess soft and hard tissue to create a natural smile with a harmonious relationship between the teeth and the dentogingival complex. The use of digital workflows in total rehabilitation has improved diagnosis, treatment planning and surgical performance, including implants, leading to more predictable outcomes. Surgical templates are useful tools associated with esthetic crown lengthening procedures and implant placement.



Case report

The objective of this publication is to show the wide variety of possibilities that digital work-flow offer full mouth esthetic rehabilitation through the explanation of a case report. A 30-year-old female patient presented to the clinic with the chief complaint of wanting to improve her smile. After a detailed clinical evaluation, she was offered the following treatment plan: a crown-lengthening procedure to improve the gingival architecture, replacement of the crowns on the both jaws teeth, placements implants on 15, 25,36,37,46,47 area. She was scanned intraorally using the i-500 Medith. The smile design was carried out using the exocad program. Surgical guide was designed with 3D computer graphics software toolset. The surgical guide were 3D printed a clear preparation matrix for provisional fabrication. The patient was locally anesthetized. The surgical crown lengthening guide was seated, and gingivectomy was completed. With the surgical guide in place, the biologic width of 3 mm was established from the future crown margin. The flap was replaced slightly coronal to the desired gingival margin position to account for shrinkage during healing. After of healing, the patient returned for preparation and provisionalization. The patient was advised to "test drive" the provisionals in order to make any necessary adjustments. The final impression was taken using digital scanner. Occlusion was adjusted.

Conclusions

The utilization of digital technology allows for visualization of the desired clinical outcome prior to surgery. This results in clear communication of the position and shape of the gingival margin to the surgeon. The digital technology has allowed for a novel approach to aesthetic crown lengthening. Digital smile design, a digital wax-up, and 3D printing provide an opportunity for facially driven treatment planning and an agreement in aesthetic parameters among the dentist and patient.



C2 Management of closed oroantral communication for implant site development: One case report

Reem AlAli

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Background

Cases of management of schneiderian membrane fusion to the oral mucosa in the area of a lateral window sinus lift procedure are scarce. This case report presents a novel technique in management of such cases.

Case report

A 36 years old patient presented to dental clinic seeking dental implant treatment. The patient has a history of oro-antral communication that developed after dental extraction. She was subjected to a long history of treatment consisting of saline irrigation for about 1 month until closure. Upon oro-antral communication closure, the patient developed chronic sinusitis and sinus polyps that would interfere with dental treatment, patient was referred to ENT clinic for consultation and management. Subsequently, she was treated with endoscopy twice for clearance before sinus surgery. After ENT clearance, a CBCT scan was taken, it shows an area of fusion between schneiderian membrane and oral mucosa.

Conclusions

This case demonstrates a contemporary concept and technique for management of sinus membrane fusion as a result of untreated/complicated oroantral communication. lateral window sinus floor elevation with guided bone regeneration could be an appreciated method to increase bone quantity and quality of posterior maxilla for implant placement.



C3 The connective tissue graft wall technique (CTWT) application for the treatment of intrabony defect, gingival recession and papilla loss. 2 years follow-up

Jennifer Romina Alberichi, Alexandra Rendón*, Giovanni Zucchelli*

University of Buenos Aires, Argentina; *University of Bologna, Italy

Background

In 2014 a novel technique was introduced by Zucchelli et al. to improve root coverage in gingival recessions (GR) associated with interdental hard and soft tissue loss by applying a connective tissue graft (CTG) in combination with the enamel matrix derivative (EMD) under a coronally advanced flap (CAF). The aim of this case report is to describe this surgical technique performed to improve soft tissue, interdental papilla and treat an intrabony defect.

Case report

A 29y.o. female diagnosed localized Stage III Grade C periodontitis, bruxism and malocclusion presented two lower central incisors with GR RT3-Cairo, interdental attachment/papilla loss (Class 3-Nordland/Tarnow), absence of keratinized tissue (KT) and periodontal pockets consistent with the intrabony defect observed radiographically. After cause related therapy, surgery was performed. Flap design consisted in submarginal incisions from 4.2 to 3.2 convergent towards the bony defect and simplified papilla technique between 41 and 31. The buccal flap was raised with a split-full split approach to consent its coronal advancement. The supracrestal soft tissues of the preserved papilla were raised lingually to gain access to the defect. The adjacent papillae were de-epithelialized, the roots were treated with 24% EDTA for 2 minutes, and EMD was applied for 1 minute. A CTG harvested from the palate was fixed buccally with simple interrupted sutures anchored to the base of the papillae. Sling sutures were used to fix the flap and a horizontal mattress suture was done at the base of the preserved papilla to complete closure, sutures were removed at 2 weeks. The 2 year-follow up revealed periodontal stability and soft tissue improvement (partial root coverage, increased in thickness,



presence of KT and papilla gain) without bleeding on probing. Radiographic bone fill is observed.

Conclusions

The main indication for this technique is the presence of intrabony defects without buccal wall and gingival recessions with soft tissue interproximal loss. The dense subepithelial CTG might represent a rigid enough barrier to compensate for the lack of a buccal bone wall, aiding in blood clot stabilization inside the bony defect. Furthermore CTG application below the supracrestal tissue prevents its collapse inside the supra-infrabony component of the defect, improving the position of the interdental soft tissues. In the present case report, the combination of CTG + CAF was able to improve clinical periodontal parameters as well as the soft tissue conditions (partial root coverage, increased gingival thickness, presence of KT and papilla gain) necessary attributes for long term stability.

C4 Restoring pink esthetics: A restorative approach

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Background

Important aesthetic criteria related to periodontal techniques need to be taken into consideration in cases where there are defects in the periodontal architecture of the edentulous alveolar process so as to provide a prosthesis with natural and aesthetic appearance. Many surgical and prosthetic procedures exist to augment soft-tissue contours and try to reconstruct the inter-dental papilla.

Case report

A 29-year-old male patient had presented with a chief complaint of post traumatic upper central incisors loss. On clinical examination, the patient showed an insufficient mesio-distal space for the two central incisors replacement. On radiographic examination, the closure of the intermaxillary suture was incomplete. The decision of implant supported fixed prosthesis was no longer possible and a



porcelain bridge from canine to canine was then decided instead. In this case, using a computer aided fabricated provisional bridge in association with a surgical guide digitally conceptualized issued from the provisional bridge presents a solution to guide both the gingivoplasty and the regeneration of the papilla providing greater biocompatibility and better esthetics.

Conclusions

Maintaining the interdental papilla following tooth extraction has been a hard task for restorative dentistry especially in zones which represent a great aesthetical challenge. The association of periodontal and prosthetic techniques can solve this type of situations.

C5 A trimodal approach technique in aesthetic zone: A case report with clinical implication and literature review

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Background

A previously treated root canal tooth with symptomatic apical periodontitis and an inadequate ferrule effect, especially in esthetic zone, requires immediate placement and restoration with implants through a trimodal approach (TA). This technique consists in an immediate post-extraction implant under a flapless protocol and simultaneous placement of an implant-supported provisional restoration, to preserve the tissues and shape the emergence profile of the definitive restoration from the outset.

Case report

We present the case of a 37-year-old woman who presented pain in the left central incisor (tooth No. 2.1). On radiological examination with a CBCT, we detected a radiolucent periapical lesion and a type 1 socket. Surgical treatment required atraumatic extraction of the tooth while maintaining the periosteal blood supply, using a 15c scalpel blade to dissect the supracrestal fibers and removing the tooth. We debride and clean the socket and immediately place an



implant with a conical morphology and internal connection with a platform change (BLT NC 3.3x10 mm, Straumann Dental Implant System) with a torque of 40 N. To increase the buccal volume and compensate for the subsequent loss of bone, we filled the space with small particle bone xenograft (Geistlich Bio-Oss, Inibsa Dental). We augmented the soft tissue area with a 10x5mm connective tissue graft taken from the patient's palate in the first molar area, between the gingival margin and the midline raphe, and stored in surgical gauze moistened with isotonic saline. After careful evaluation for bleeding, the donor site wound was closed with sutures. Subsequently, the graft was de-epithelialized and sutured with a vertical mattress. To ensure an immediate functional and aesthetic result, we use the patient's crown as a provisional one, leaving it in infra-occlusion. After 4 months, we replace the patient's own crown with the final personalized zirconia crown.

Conclusions

With traditional restorative techniques, not only the patient had to face with a protocol consisting of several appointments over a long period of time, but significant changes in hard and soft tissue morphology could occur after periodontal ligament removal, thereby that could affect tissue stability and aesthetics. Instead, in TA the immediate implant placement, has significant advantages: reduction of treatment time, immediate aesthetic effect, and preservation of the gingival architecture of hard and soft tissues. TA is indicated when both the soft tissue and the bone are intact at the time of tooth extraction, but different techniques can be associated to address future bone defects or the probable modification of the mucosal-osseous architecture. Despite everything, the technique must be approached with caution and by experienced hands, because this protocol could also cause an aesthetic and functional risk if it is not dealt with in a technically refined manner.



C6 Split crest technique for horizontal alveolar bone augmentation: A Case Report

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Background

The split crest technique (SCT) is a surgical procedure performed to increase thickness of horizontal ridge in cases of narrow crestal ridges, commonly indicated for area with low local density and bone resorption. It is a biologically oriented technique, taking advantage of the osteogenic and osteoconductive dynamic of the native bone. Recently, the utilization of devices such as piezoelectric cutting devices has promoted SCT success rate, reduced surgical time and patient's morbidity

Case report

A 40-year-old healthy man presented for implant treatment in the posterior mandibular region (second premolar and first molar in the right side of the mandible). The clinical examination and the evaluation of the dental CT scan revealed that the width of the alveolar ridge was inadequate for implant placement. Ridge splitting, using piezoelectric surgery, was performed under local anaesthesia in order to create the desired width for implant placement. Piezoelectric osteotomes of increasing size were used for the progressive lateralization of the buccal plate. Dental implants were placed immediately. In order to promote healing and osseointegration, the residual gap between the implants and the 2 plates was filled with allogenic bone graft and covered with platelet rich fibrin and a resorbable membrane. The post-operative follow-up was uneventful.

Conclusions

Ridge splitting is a minimally invasive technique indicated for narrow alveolar ridges with adequate height, which enables immediate implant placement and eliminates morbidity and overall treatment time. However, it requires careful planning and utilization of instruments when splitting and expanding the ridge.



C7 Pre-prosthetic periodontal surgery: About a case

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Aim

Management of patient requiring pre-prosthetic periodontal surgery to meet her aesthetic and functional needs.

Materials and Methods

-A 65 years old woman was referred by prosthodontist, she presents a proliferation fibromucosa filling the mandibular vestibule, making the lower prosthesis unstable; her pre-operative checkup reveals high daily blood sugar. -The patient received support by diabetologist to balance her diabetes confirmed by Hba1c , followed by periodontal surgery.

Results

The result obtained meets the biological (an adequate prosthetic support surface), aesthetic and functional criteria.

Conclusions

-Pre-prosthetic periodontal surgery allows to correct the defects and restore an adequate gingival architecture which meet the aesthetic and functional requirements ensuring the durability and stability of prosthetic treatment.

C8 Treatment of multiple RT2 gingival recessions with vista technique: A multidisciplinary clinical case

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Background

Gingival recessions, represent one of most important esthetic compliance in periodontal field. Among mucogingival surgery goals,



complete root coverage should be considered complementary to an esthetic outcome in terms of texture, color and absence of scar tissues at gingival level. VISTA technique (Vestibular Incision Subperiosteal Tunnel Access) is a predictable approach in terms of root coverage and it brings several advantages compared to other mucogingival surgical techniques.

Case report

A 45 y.o female patient with a healthy reduced periodontium, attended to the department of periodontology at Universitat Internacional de Catalunya asking to improve her smile after finishing orthodontic therapy. It was proposed a combination of mucogingival surgery and restorative therapy to improve her esthetic. In this case it is described the treatment of multiple RT2 maxillary gingival recessions by means of a tunnel technique associated with two incisions at mucosa level. After anesthesia, two vertical incisions between centrals and lateral incisors were designed. A full and partial thickness flap was raised in order to coronally advance the flap. A connective tissue graft was inserted in the tunnel and sutured coronally with the flap by means of double cross sutures and the vertical incisions were sutured with 7.0 PGA suture. After 3 months of healing an almost complete root coverage was achieved and ceramic veneers were delivered to finish the multidisciplinary treatment.

Conclusions

This clinical case showed the efficacy of tunneling technique for the treatment of multiple gingival recessions at maxillary level. Tunneling procedures have received several modifications among the years. Among the most important, advancement of the flap and the use of vertical incisions are the ones who probably have improved the most the predictability of these procedures. The modification of the technique by means of vertical incisions at alveolar mucosa level can facilitate the procedure reducing the risk of perforation and laceration of the flap which are common complications in both tunneling procedures. Moreover, by avoiding incisions at level of the papillae, this technique is especially indicated for treatment of patients with high esthetic demands as showed in this clinical case. One other main advantage of this



technique modification is the reduce surgical time which has been associated with a reduced morbidity for the patient.

C9 Implant placement in esthetic area with simultaneous lateral guided bone regeneration and autogenous soft tissue grafting

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Background

It is well known the consequence after tooth extraction, in terms of hard and soft tissue collapse. The aim of this clinical case was to carry out a stable solution after tooth extraction with the placement of a small diameter dental implant in esthetic area, combined with hard and soft tissue augmentation.

Case report

The treatment plan was initially a professional oral hygiene to reduce the level of FMPS-FMBS, and after achieving that primary outcome it was possible to plan the surgical therapy. Considering the absence of periodontal disease, the patient didn't need periodontal therapy. Due to the presence of extensive fracture and mobility, the extraction of tooth 1.1 was planned. According to the thickness of the facial bone wall less than 1mm, the atraumatic tooth extraction with simultaneous ARP with collagen membrane and collagenate DBB was performed to maintain significantly less vertical and horizontal reduction of the alveolar bone crest. After four months of healing, the implant surgery with simultaneous lateral bone augmentation using collagen membrane and DBB was performed with full guided surgery to replace the tooth 1.1. Three months later, the second stage surgery was performed with the placement of a provisional screw-retained restoration and immediate soft tissue augmentation with de-epithelialized CTG to increase the thick of the soft tissue on the buccal aspect. After 12 weeks of healing a definitive fixed screw retained restoration with layered zirconia was delivered.



Conclusions

This clinical case describes the surgical and prosthetic treatment to replace a tooth 1.1 using a dental implant and a screw-retained restoration with a follow-up period of 18 months without any biological and mechanical complications. The combined use during the whole treatment period of alveolar ridge preservation, later horizontal bone augmentation with simultaneous placement of small diameter dental implant and soft tissue grafting represent a solution to avoid peri-implant mucosal recession over time. It is important to keep in mind that the absence of periodontal disease, plaque control and patient compliance with supportive implant therapy represents the keys factors for a good long-term prognosis.

C11 Soft tissue management around teeth and natural implants in the anterior region for esthetic smile rehabilitation

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Background

Prosthetic rehabilitation whether it is dental or implant-based, is considered to be a clinical challenge, especially in the esthetic area. Numerous factors can influence the outcome, notably bone and soft tissues deficiencies highly encountered in edentulous ridges. Planning to overcome these issues is helped by the use of computerized guided surgery and the use of regenerative techniques to ensure osseointegration and esthetic results.

Case report

A 50-years old female patient presented with an inaesthetic and defective dental prosthesis from the maxillary right central incisor to the left lateral incisor and a gummy smile. After removing the bridge, a clinical and radiological examination, the abutment teeth were deemed non-restorable and removed followed by socket preservation, buccal ridge augmentation. Surgical crown lengthening through gingivectomy/osteoplasty has been performed



on the remaining teeth for canine to canine. After 7 months, three implants were placed on site of the two central incisors and left lateral incisor using a surgical guide. Sticky bone was adapted to the defect site observed buccal to the left later incisor and PRF membranes were used as barriers and to enhance soft tissue contouring. The plan treatment for the rehabilitation of the patient's smile included three separate crowns at the sites of the implants and dental veneers on the right lateral incisor and both canines. A mock-up was made as a preview for the planned prosthetic restoration and was validated by the patient. The initial bone and soft tissue management techniques provided a more predictable outcome for the final result and the patient was satisfied with her new harmonious smile.

Conclusions

Esthetic demands are becoming more and more required by the patients. The rehabilitation of the smile in some cases is both surgical and prosthetic. In the present case, the patient has undergone mucogingival surgery to alleviate the gummy smile combined with soft tissue management techniques to enhance gingival contouring at the site of the implants as well as to shelter the underlying osseous structures and ensure osseointegration surrounding the implant body.

C12 Lateral approach for the regenerative treatment of intrabony defects associated with edentulous spaces. A pilot case

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Aim

Within this report, a lateral approach for regenerative treatment of the intrabony periodontal defects associated with edentulous spaces is suggested, described, and evaluated. The goal of the method is to prevent the most common complications of the gold-standard flap design for this indication and create more favourable conditions for periodontal regeneration.



Materials and Methods

Basic prerequisites for periodontal regeneration are space provision and stable soft tissues. In case of regenerative treatment of the intrabony defects associated with edentulous spaces, gold standard for flap design, as described by Cortellini, includes: crestal incision right above the treated site, releasing vertical incision(s) and reflection of both buccal and oral flaps. Most common complications are exposure of the regenerative material and marginal flap dehiscence, leading to improper regeneration of periodontal tissues and poor results. To prevent these complications and to guarantee an undisturbed healing process, we propose novel surgical approach with specific flap design. The flap is defined with a curved vertical incision on the buccal side on the opposite aspect off the treated defect, and a sulcular incision on buccal and defect-associated aspect. A full-thickness flap is then raised and hyper-mobilized, ensuring proper access but maintaining uncut soft tissues above the defect. For the elevation of the flap, both sharp and blunt dissection is performed, using instruments like periosteal elevator, microblade and/or tunnelling instruments. After degranulation, and scaling of the affected root surface, a regenerative strategy is applied. In this case, amelogenins and bovine bone xenograft is used. In the presented case, we treated an intrabony defect distal to lower right second molar. Such defects frequently develop after a third molar removal.

Results

In the reported case, we treated a residual periodontal pocket of 7 mm and positive BOP in the area of 47D – distal aspect of the lower right second molar. An intrabony defect was present. The lesion was associated with a third molar removal. The lateral approach was performed, as described above. Access was optimal. Debridement of buccal, distal and even disto-buccal root surface was possible, using ultrasound tips and Gracey curettes. In this case, after degranulation, debridement and complete hemostasis, the regenerative strategy was applied as follows: amelogenins (Emdogain®, Straumann) for 4 minutes, bovine bone xenograft (BioOss®, Geistlich) mixture with blood. Reposition of the flap was passive. The wound was closed with interrupted sutures (Resolon® 5-0, Resorba). Adjuvant systemic antibiotics were prescribed, and



patient was instructed about specific home care. Suturing was only performed where the former vertical incision was, far from the defect and the regenerative materials. Therefore, in case of complicated healing with marginal flap dehiscence, the actual defect would not be affected, and materials would not get exposed. Patient was checked after 9 days and sutures were removed. Healing was uneventful. At re-evaluation after 4 months, former probing depth was reduced to 4 mm, BOP negative, no reported discomfort. X-ray analysis shows a significant bone fill and a defect angle reduction.

Conclusions

This lateral approach is specifically tailored for regenerative treatment of intrabony periodontal defects next to edentulous spaces. Possible common complications of a gold-standard flap design are prevented by a shift of the most vulnerable area away from the regenerated site. Moreover, the intact soft tissues above the defect act as a membrane and keep the regenerative material undisturbed during the healing. Despite the need for specific instruments, the procedure is not time-consuming or difficult to perform. Altogether, less complications and better results of regeneration might be expected, compared with a standard flap design. We suggest the use of this approach especially in cases of distal or disto-buccal intrabony defects, which frequently develop in lower second molars after third molar removal. A prospective case series will follow to verify benefits of the lateral approach in this indication.

C13 Frenotomy: contribution in the management of mucogingival defects

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Background

Periodontal recession is a clinical entity that is part of the mucogingival anatomical defects. Given the consequences of this lesion (thermal hypersensitivity, lengthening of the visible part of



the tooth) patients consult for fear of losing their teeth and to regain their aesthetics. The treatment of this type of pathology is based on either root covering or stabilization and prevention. Atraumatic Frenotomy is a stabilization and prevention technique.

Case report

This is patient A. Zineb aged 56 years with type II diabetes (HBA1c= 6,60) who consults for gingival bleeding, chewing disorders and aesthetic damage. Clinical examination reveals: Insufficient oral hygiene, gingival inflammation, Loss of interdental clinical attachment: 04 mm, Periodontal pocket depth: 5mm, Recession Type 2 (RT2) and Apical traction of the tissues bordering the recession on 41 by the medial mandibular frenum. Radiological examination: there is horizontal bone destruction. The diagnosis: according to the new classification of periodontal diseases (Chicago 2017), it is a localized periodontitis stage II grade B. The treatment modalities are non-surgical at first: - Motivation for oral hygiene, - Diabetes being balanced drug prescription is not indicated, - Scaling and root planing. After reassessment of tissue response to non-surgical treatment, and in response to the patient's request that she not accept treatment of recession with gingival graft, atraumatic frenotomy was performed. This intervention gives always minimal surgical follow-up and rapid healing since it is a closed wound knowing that diabetes induces a delay in healing. The result obtained after the surgery allowed the patient to return to a periodontal state whose clinical characteristics facilitate brushing.

Conclusions

Depending on the objective sought, the surgical treatment allows to have an aesthetic or functional correction to improve comfort, facilitate plaque control and therefore the reduction of inflammation. Atraumatic frenotomy technique is one of the techniques whose objective is the stabilization and prevention of root denudation. There is an increase in the height of the vestibule. The initial mucous tissue of the frenum becomes an attached mucosa. The results are constant and predictable and the evolution of a possible recession minimized. It is a less aggressive technique than conventional frenectomy. This type of intervention is not suitable for the maxillary median frenum whose mucous anatomy is wide and protruding.



C14 Multidisciplinary approach to perio-ortho treatment. Case report

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Background

Multidisciplinary approach is a key factor in up-to-date dental treatment. One of its best example is perio-ortho treatment. Underlying periodontal problems can worsen during orthodontic treatment so it's important to control them first. It's also crucial to eliminate potential risk factors of recurrence. One of them, regarding malocclusion, may be tongue thrust and a forward rest position of the tongue tip. Such problems require cooperation with speech therapists and patient's compliance.

Case report

A generally healthy 39-year-old female patient reported to our clinic with complaints about the unaesthetic appearance of her smile, and increased mobility of lower incisors, causing trouble while eating. These conditions have been first observed by the patient around 2 years earlier. No periodontal examination or treatment was previously conducted. A dental, periodontal and orthodontic examination was performed, combined with radiographs (pantomographic, cephalometric and cone beam computed tomography), intraoral and extraoral photos and orthodontic casts analysis. The first phase was focused on periodontal condition. Elimination of plaque retentive factors, proper plaque-control oral hygiene, and non-surgical periodontal therapy was performed. Subsequently, a proper level of oral hygiene was achieved.

Conclusions

Periodontal disease can cause bone defects and pathologic tooth migration (PTM) such as midline diastema in mandible or maxilla which can result in lowering patients' quality of life. Diagnosis and treatment should be performed with consideration of the patient's dental history and comprehensive examinations. Multidisciplinary treatment may result not only in esthetic but also functional



improvement of patient's teeth condition, elimination of potential risk factors of recurrence (tongue reeducation and miofrenuloplasty), improvement of esthetic conditions and stabilization of proper occlusion, giving the patient long term stable oral health.

C15 Dental implant placement on alveolar ridge preservation with autologous dentine particulate, platelet-rich fibrin and collagen plug - a case report

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Background

Alveolar ridge preservation significantly minimizes physiological bone resorption (ARP). ARP can be conducted using bone graft material with a combination of other bioactive materials. Composition of dentin and bone are comparable. It goes through a remodeling process when used as a bone substitute, turning it into bone. The case study proposes an approach in which autologous particulate dentin is used together with platelet-rich fibrin (PRF) and collagen plug for ARP prior to implant placement.

Case report

The failed root canal treated fractured, unrestorable right premolars teeth 14 and 15 were atraumatically extracted with an open flap and immediately sent for cone beam computerized tomography (CBCT). The extracted tooth was cleared of the remaining periodontal tissue. The root canal filling, coronal restoration, enamel, and cementum were also removed. The dentin was then processed using a commercialized machine to become particulate with the size of 300-1200 μm and was immediately inserted into the alveolar socket, together with PRF and collagen plug. Soft tissue closure was performed to protect the socket. After an observation period of 4 months, clinical and radiographical measures through CBCT were taken to observe the differences from



the baseline. Histological measures also were performed prior to the placement of two units of implants in the ARP area, which osseointegrated successfully and could be restored prosthodontically in the following.

Conclusions

The pre-implantological, ARP with dentin, PRF and collagen plug could be performed successfully. However, a clinical trial is necessary for the establishment of autologous dentin, PRF and collagen plug as augmentation material for jaw augmentation procedures.

C16 Increasing the width of the attached gingiva with free gingival graft treatment of RT1 gingival recession observed after orthodontic treatment: Clinical case report with 1 year follow-up

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Background

Free gingival graft (FGG) is widely used to increase the amount of attached gingiva. The aim of treatment in this case was to obtain an adequate attached gingiva and adequate vestibule depth. FGG has been the preferred method as it will achieve these aims. In this clinical case report, it is aimed to present the treatment of a patient with RT1 gingival recession in the mandibular anterior region with SDG and the 1-year follow-up of this case.

Case report

A 26-year-old male patient without any systemic disease was referred to our clinic with the complaint of gingival recession in the lower anterior region. In his dental history, it was learned that he had received orthodontic treatment. It was decided to apply FGG in order to increase the width of the attached gingiva in the number 31 tooth region, which was found to be RT1 gingival recession in the clinical examination. Initial periodontal treatment of the patient was performed and oral hygiene education was given. At the next



appointment, the surgical phase was started. FGG was taken from the palatal region in accordance with the size of the prepared recipient site. The FGG was sutured to the recipient site with 5-0 prolene sutures. Postoperatively, the patient was prescribed 0.12% chlorhexidine gluconate mouthwash twice a day, analgesic and an antibiotic for possible postoperative infection. When the patient was called for control in the first week, irrigation of the recipient area with physiological saline was performed. The sutures were removed 2 weeks after the operation. First week, second week, first month, and first year follow-ups were performed and no complications were observed in the patient.

Conclusions

At the end of the 1-year clinical follow-up period, an increase in the width of the attached gingiva and a physiological sulcus were observed in the relevant region. FGG is a highly effective treatment option used to increase the width of keratinized tissue. In conclusion, surgical treatment using FGG resulted in root closure in RT1 gingival recession, high color match with surrounding tissues and increased gingival width.

C17 Multiple recession treatment using a combined surgical approach of a connective tissue graft and coronally positioned flap

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Background

Different surgical techniques have been proposed for the treatment of single and multiple gingival recessions (Cortellini et al 2012). Coronally advanced flap (CAF) can be used in combination with connective tissue graft (CTG) (Cortellini et al 2012). This combination has been showed as the technique with the greatest potential for recession reduction and complete root coverage (Chambrone et al 2010).



Case report

A 26 years old woman, non-smoker and healthy, presented multiple RT2 gingival recessions classified on the teeth 11,12,13,14,15 (Cairo et al 2010). To its treatment, a CAF (ZuccAnthony A Melcherhelli et al 2000) combined with CTG at tooth 14 was performed. Horizontal oblique incisions were made interproximally from teeth 11 to 16 in continuity with intrasulcular incisions at the recessions. The flap was then elevated with the split-full-split approach in the coronal-apical direction. The portion of the roots exposed due to the gingival recession were mechanically debrided. The remaining tissue of interdental papillae was de-epithelized. A CTG was collected from the palatal pre-molar region and sutured covering the recession of tooth 14. Flap was coronally advanced and each papillae rotated until complete adjustment to interproximal area and when marginal portion of the flap was placed coronally to the cemento-enamel junction at each teeth in the surgical site. Sling sutures were made to adequate position and stability of the flap. Patient was instructed not to brush teeth in the surgical area for 2 weeks and restart brushing with a soft toothbrush. The patient was prescribed 1g of paracetamol each 12h for 3 days and a chlorohexidine 0,12% mouthrinse for 2 weeks. The sutures were removed after 12 days of healing. This clinical case has a follow up of 2 months.

Conclusions

Stable results were obtained after 2 months. Complete root coverage was achieved for teeth 13 and 15 while partial root coverage was observed for teeth 11,12 and 14. An increased gain in keratinized tissue was observed in the 13 and 14. Creeping attachment can be expected to occur over time, improving the results of this clinical case.



C18 Vestibuloplasty of lower posterior teeth with Kazanjian technique and frenectomy: A case report

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Background

In addition to addressing mucogingival problems, aberrant frenal attachment and inadequate width of keratinized tissue may adversely affect periodontal health. The presence of shallow vestibules further complicates these conditions. The co-existing of these three factors impairs self-performed mechanical plaque control, predisposes to gingival recession, and compromises prosthesis retention and stability.

Case report

This case report describes the management of high frenum attachment buccal to tooth 45 of a 56-year-old Malay gentleman, associated with shallow vestibule adjacent to the edentulous ridge of missing tooth 46. The patient reported recurrent episodes of traumatic ulcers on buccal gingiva of teeth 44 and 45 due to frequent toothbrush slippage. Tooth 45 was associated with RT-3 gingival recession, with mean recession depth, probing pocket depth and clinical attachment loss of 3 mm, 3 mm and 6 mm, respectively. Prior to the surgery, buccal abrasion tooth 45 was restored with composite material. Following a frenectomy of the buccal frenum between tooth 45 and tooth 46 under local anesthesia, a Kazanjian vestibuloplasty was performed. A single horizontal incision was performed at the level of the mucogingival junction. A split-thickness flap was reflected towards the alveolar mucosa and muscle fibers and tissue were dissected from the periosteum. Afterwards, the undermined flap was stabilized apically with simple interrupted sutures and protected with periodontal dressing. He was recalled every two weeks for up to one month,



and monthly for up to six months for a review. Professional prophylaxis was performed as necessary. Upon six-month review, the mean recession and clinical attachment loss of tooth 45 were 2.7 mm, with mean clinical attachment gain of 0.7 mm. Apparently, patient reported no event of ulcers developed at that area and plaque control was improved.

Conclusions

It is recommended that mucogingival surgery be performed in cases of inadequate keratinized tissue width, decreased vestibular depth, and high muscle pull to facilitate plaque control, reduce or halt gingival recession, and improve patient's comfort during tooth brushing. In addition to frenectomy, Kazanjian vestibuloplasty is relatively simple, less time-consuming, less morbidity, and results in aesthetically pleasing tissue match. Furthermore, the procedure assists in reducing or maintaining the existing recessions.

C19 Free gingival graft and subepithelial connective tissue graft (tunneling technique): Predictable surgical therapies for the treatment of gingival recession

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Background

When a patient presented with gingival recession, clinician should consider periodontal grafting procedure that offer predictable benefits for restorative, esthetic and reduce tooth hypersensitivity. The aim of this case series is to present the predictability of surgical therapies with both free gingival graft (FGG) and subepithelial connective tissue graft (sCTG) on mandibular incisors. The main focus is the use of FGG and sCTG, which have shown more predictable outcomes than other approaches.

Case report

Two patients with gingival recession on mandibular incisors are described. All recessions were recorded by using new classification system of gingival recessions (Cairo 2011). Probing depth, gingival



recessions, clinical attachment level (CAL), presence or absence of cemento-enamel junction (CEJ) \pm cervical lesions, and gingival biotype were recorded and the data compared. Photographs were taken at baseline, 3 months, and 6 months. Case 1: The patient was presented with RT3 gingival recession of 3 mm on 31 and 41. Initial horizontal incision was made, followed by partial-thickness dissection. Then, FGG was harvested from the palate and fixated to the recipient bed. At 6 months post-operatively, the new band of keratinized tissues and thick gingival tissue were evident. Case 2: The patient was presented with RT1 gingival recession of 2 mm on 31 and 41, and 1 mm on 42. Following root debridement, tunneling was performed from margins of the recession, extended laterally to mid-facial line of the adjacent teeth at level of buccal CEJ, and extended further apically to minimize tension from underlying muscles. Following harvesting of sCTG from the palate, the graft was placed under the tunnel and sutured from either side. Six-month follow-up shows stable gingival margins with complete root coverage.

Conclusions

FGG can be used in the mandibular anterior area, as it creates a band of keratinized tissue that can resist recession but has problems such as colour match and graft shrinkage. FGG technique was considered a viable treatment option in the less demand aesthetic area and effective for treating thin gingival phenotype with satisfactory result. Tunneling (TUN) technique is also an excellent technique to manage gingival recession. The incision free design and gingival papillary preservation are considered as the main advantages of TUN. The only limitation of applying this technique is when thin gingival biotype is present that makes the TUN preparation with partial thickness flap difficult. In summary, with limited number of cases, FGG and sCTG are considered treatment options for predictable root coverage procedures. Post-operative follow-up, at different times, showed complete root coverage of all receded root surfaces in gingival recession on mandibular incisors.



C20 VISTA technique in the anterior mandible: A clinical case

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Background

Gingival recession is described as the location of the free gingival margin apically to the cement-enamel junction. One of the goals of plastic periodontal surgery is to correct gingival recessions. Over the years, several surgical techniques have been proposed. The VISTA (Vestibular Incision Subperiosteal Tunnel Access) technique, which is a minimally invasive procedure, has been deemed successful in granting root coverage.

Case report

This clinical case concerns a 27 years-old female patient with complaints related to the aesthetics of the gingival margin in her lower anterior teeth. At clinical examination, a gingival recession measuring 3mm was identified on the buccal surface of tooth 31. It was classified as a RT2. The patient was, otherwise, healthy. After the administration of local anesthesia, the exposed root surface was scaled and planned. The VISTA technique was initiated by the performance of two vertical access incisions on either side of the gingival recession, followed by the elevation of a subperiosteal tunnel. The presence of less than 2mm of keratinized tissue and a thin biotype, dictated the need for the placing of a connective tissue graft. This graft was collected from the posterior area of the palate using the double incision approach and placed within the above-described tunnel. The immobilization of the graft was made by placing vertical mattress sutures on each side, using a 6-0 suture. Then, it was coronally repositioned by a suspensory suture anchored at the contact point on each side of the tooth, using a 5-0 suture. The patient was instructed to passively rinse two times per day with a 0,2% CHX solution starting the day after the surgery and until the removal of the sutures at 14 days post-operative; only then could she restart brushing using a soft brush and the rolling



technique. Ibuprofen (600mg) every 8h was prescribed to be taken in case of necessity.

Conclusions

This clinical report highlights the successful application of the VISTA technique in conjunction with an autologous connective tissue graft. Here, the VISTA technique, most promptly used in the aesthetic zone, allowed total root coverage of the initial 3 mm gingival recession present on tooth 31. The results attained are supported by the literature, where the VISTA technique is reported has an effective option in the treatment of gingival recessions, offering several advantages: minimally invasiveness, causes less trauma to the soft tissues, thus providing better tissue healing and greater comfort for the patient. Overall, the position of the gingival margin was corrected and the quantity of keratinized tissue and soft tissue volume were improved, guarantying stable results at 2 months and patient satisfaction.

C21 Immediate implant placement in infected region: Esthetic management using surgical-prosthetic approach

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Background

Immediate implant placement in the esthetic region is a technique-sensitive procedure. Each case requires thorough evaluation and treatment planning to achieve superior esthetic outcomes and avoid any failures. The aim of this report is to discuss the successful management of a complicated case of crown fracture associated with acute infection, using an immediate implant along with achieving superior esthetic outcomes and the expected complications

Case report

A 30-year-old female patient reported fractured tooth wrt 21 supporting an unesthetic restoration. The SAC tool was used to carry out an assessment of the patient. Normative SAC classification of the case was COMPLEX with high esthetic risk and



risk of complications. The case was managed by immediate implant placement following the removal of the fractured root. Peri-implant-guided bone regeneration procedure and soft tissue augmentation using connective tissue autograft were carried out in a staged approach, to improve the esthetic outcome. Conventional loading was done following the surgical procedure. Micro-esthetics were corrected using restoration over 11 and 22. RESULTS: Results were analyzed in terms of implant stability and esthetic outcomes using PINK and WHITE ESTHETIC SCORE. A remarkable improvement was noted after Stage II surgery. The final PES/WES of 17/20 was obtained which is well above the clinical acceptability threshold.

Conclusions

Restoring missing teeth in the esthetic region is a challenge and requires proper workup and treatment planning to avoid failures and achieve superior esthetics. The present case reports the challenges faced during the successful restoration of edentulism using dental implants in the esthetic region in an acutely infected site

C22 Management of RT1 recession using envelope technique with connective tissue graft: 3 Years Post-operative outcome

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Background

Marginal tissue recession (MTR) is the most common mucogingival condition that we come across in our clinical practice. Most of the individuals report concerns about esthetics as well as root sensitivity affecting their quality of life. The objective of this poster presentation is to present a case of RT1 recession and excellent long-term post-operative outcomes achieved through the Envelope technique using a Connective tissue graft.

Case report

A 45-year-old patient, having RT1 recession in esthetic region, was managed using envelope technique under a microscope using connective tissue autograft. Clinical assessment included recession



depth, recession width, pocket probing depth at baseline and 6 months and 3 year post-operatively. Results Patients having RT1 recession defects showed complete root coverage and improved gingival phenotype along with higher patient overall satisfaction. Root coverage has been predictable on reviewing the patient after 3 years.

Conclusions

Patients having RT1 recession defects showed complete root coverage with envelope CTG under microscope with excellent post operative esthetic results.

C23 Restoration of a failed implant site in the esthetic area: A soft tissue-prosthetic approach

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Background

As recently proposed (Zucchelli et al. 2019) peri-implant soft tissue dehiscences (PSTD) can be classified according to position of the implant crown/platform with respect to the buccal profiles of the adjacent teeth (classes I-IV) and peri-implant papilla height (Subclasses A-C). This consents treatment planning in different clinical scenarios, allowing to choose among different treatment modalities: CAF + CTG, combined prosthetic-surgical approach, submerged technique, or implant removal.

Case report

42 y.o. female patient presented with esthetic concerns related to an implant in the 2.1 position. Peri-implant conditions (PSTD, severe buccal implant malposition, vestibular proclination of the implant axis, and inadequate papilla height) led to the decision of implant removal. The implant was unscrewed and spontaneous healing was allowed to occur while placing a provisional Maryland bridge. After 6 months of soft-hard tissue maturation, a cone beam CT and digital impressions were taken to plan guided implant placement (3.3x 12mm BLT, Straumann). During implant installation surgery, a split-full-split thickness envelope flap was



elevated and guided bone regeneration at the implant site was performed with a mixture of bone xenograft/autograft covered and stabilized with a resorbable collagen membrane sutured to the surrounding periosteum. A CTG was harvested from the palate (comprising the mesiodistal dimension of the edentulous site and the entire area of bone reconstruction vertically) and sutured to the base of the peri-implant papillae. The flap was coronally advanced and closure was achieved with sling and simple interrupted sutures. During the healing period, the provisional bridge was progressively reduced to prevent soft tissue compression. After 8 months, the surgical implant guide was used to create a tissue punch to access the implant platform and place the provisional screw-retained crown. The final crown was delivered after 6 months of soft tissue conditioning.

Conclusions

When dealing with PSTD, implant removal should be considered in the most extreme cases involving severe buccal displacement of the implant head together with lack of papilla/ae (Class IV subclass c). By implementing a combined soft-tissue prosthetic approach, we achieved restoration of a failed implant site in terms of soft and hard tissues. The highly esthetic outcome satisfied the patient's requests, bone reconstruction provided the implant with three-dimensional bone support requirements, and soft tissue augmentation ensured a natural emergence profile for the implant-supported restoration that blends in perfectly with the surrounding dentition. Complete fill of the peri-implant embrasures was also achieved thanks to soft tissue maturation and conditioning. The present case proves clinical and radiographic stability of this approach after 3 years.



C24 Soft and hard tissue management during anterior immediate implant placement in compromised sockets

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Background

Immediate implant placement in the esthetic area in sockets with both hard and soft tissue defects is challenging since they may impair the aesthetic outcome and long-term implant stability. Hence the use of per-implant regenerative techniques combined with soft tissue augmentation for peri-implant defects management. The aim of this case report is to demonstrate an anterior immediate implant placement in conjunction with hard and soft tissue augmentation techniques into compromised sockets.

Case report

A 48-year-old male presented with compromised left central incisor with a severe mobility, a deep facial recession with total loss of keratinized tissues. on X-ray, the resorbed root is located outside the bone envelope. After tooth extraction, the adequate anchoring bone available apically to the defect allowed the immediate implant placement and provided a satisfactory implant stability. In order to manage the missing buccal bone of the socket, the facial aspect of the implant was grafted with bovine bone overlaid with a resorbable collagen barrier membrane. Then a connective tissue graft (CTG) raised from the palate was placed over the implant area to enhance keratinized tissue height and a tension free primary wound closure was performed by displacing the buccal flap coronally and laterally. 8 months later, the second stage surgery was accomplished, followed by an open tray technique impression after one month. Lastly, a definitive metal-ceramic crown was inserted with periodical clinical maintenance. A harmonious soft tissue margin was achieved. Radiographs at the final restoration insertion and one year after showed a stable bone level with excellent implant osseointegration.



Conclusions

During immediate implant placement, when facial periodontal structures are compromised, the re-creation of the altered tissues is difficult, especially in the anterior maxillary area. In this case, a collagen membrane, combined with bovine mineral bone were used to facilitate Guided Bone Regeneration (GBR) around the exposed implant threads. CTG was performed simultaneously with GBR in order to enhance tissue height and improve the final esthetic result. Then, keratinized tissues adjacent to the extraction site were displaced coronally and laterally in a free tension way to prevent early membrane exposure. One year after definitive crown insertion, we noticed the stability of hard and soft peri-implant tissues with complete filling of the papilla. This result is in agreement with studies and case series which concluded that use CTG during anterior immediate implant placement is an effective option to create soft tissue volume and to ensure peri-implant tissues stability over time.

C25 Reconstructive hard and soft tissue management of peri-implantitis

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Background

Peri-implantitis is the inflammation of peri-implant tissues with bleeding and/or suppuration on probing, deepening of peri-implant pockets and peri-implant osseous bone defects. In this case, rehabilitation of peri-implantitis with hard and soft tissue reconstructions is presented.

Case report

The present case was referred to with the suppuration and bleeding around the 20-year loaded posterior mandibular implant. Peri-implant surgical procedures were planned after clinical and radiographic evaluation. Bovine bone Substitute (BBS) and Enamel Matrix Derivatives (EMD) combination was used to treat peri-



implant circular bone defect after implant surface decontamination with titanium curettes and ethylene diamine tetra acetic acid (EDTA). After reconstructive hard tissue therapy, free gingival graft was performed to create keratinized peri-implant mucosa. Clinical parameters including peri-implant probing depth, bleeding on probing, and radiographic changes in marginal bone levels were assessed at 1 and 3 months postoperatively. Permanent crowns were introduced at three months postoperatively.

Conclusions

Peri-implantitis was successfully treated with no bleeding on probing, periodontal pocket depth <5 mm, with remarkable bone gain. Adequate keratinized peri-implant mucosa was observed around the implant. Five years follow-up outcomes suggested that BBS/EMD combination and free gingival graft improved clinical and radiographic outcomes of the implant with peri-implantitis.

C26 Treatment of bone defect and severe gingival recession after orthognathic surgery with bone graft and laterally positioned flap approach-Case report

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Background

Various complications can be seen in periodontal hard and soft tissue after orthodontic treatment. Orthodontic forces, orthognathic surgeries, biotype and initial bone defects such as fenestration and dehiscence affect the severity of these complications. In this case, periodontal treatment of a tooth that developed gingival recession and bone defect after orthognathic surgery is presented.

Case report

After the orthognathic surgery, the premolar tooth (#34) with severe gingival recession and bone defect was evaluated and it was decided to try to keep the tooth in the dentition with a surgical



approach as the reconstruction of hard and soft tissues. In the clinical and radiographic examination, it was determined that the entire root length of the tooth was exposed (11 mm) due to severe recession with a circumferential bone defect in the periapical region. After full-mouth Phase-1 periodontal treatment as scaling, root planning and oral hygiene motivation followed by endodontic treatment of the related tooth, the surgical phase was started. The laterally positioned flap was elevated and the defect became visible with flap elevation. The defect was cleaned and filled with bovine bone substitute (BBS). Free connective tissue graft harvested from the palatal region to support root coverage and thickening of the biotype. After stabilizing the graft coronally with absorbable monofilament suture material, the flap is positioned laterally and it was closed primarily with a non-resorbable monofilament suture.

Conclusion

Orthodontic treatments and orthognathic surgeries can cause periodontal loss. It is also known that severe malpositions may cause gingival recession and bone defects due to traumatic occlusion. Thus, it is necessary to plan carefully considering the type and magnitude of orthognathic surgery movement, incision site, surgeon's experience level, biotype, and patient compliance with oral hygiene methods. Nevertheless, in the presence of such a defect, a hopeless tooth can be retained in the mouth with the appropriate periodontal surgical plan as laterally advanced flap supported by connective tissue graft with BBS.

C27 Management of a perio-orthodontic recession: A case report

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Background

Orthodontics can cause severe damage to both hard and soft tissues (H. Travess, 2004). Recession is the most common complication. Gingival recession may start or progress during or after orthodontic treatment depending on the direction of



orthodontic tooth movement. Thus, if they are not treated, these recessions have a high risk of progression even in subjects with good oral hygiene. And it can cause complications such as dental hypersensitivity and carious lesions (P. Cortellini, 2017).

Case report

This work relates the case of a patient who developed a recession at the incisor 31 during the orthodontic treatment. Taking into consideration the clinical situation, the management of the orthodontic recessions by surgical techniques was crucial in order to increase the gingival tissue amount. For that matter, root coverage surgery using free gingival graft was the most appropriate therapy to prevent the progression of the recession. The patient was compliant, with healthy periodontium, which allowed us to opt for mucogingival grafting procedure.

Conclusions

Keratinized tissue augmentation procedure aims to provide crucial changes to the soft tissues around gingiva, such as increasing the height and width of keratinized tissue. By maintaining adequate hygiene, free gingival graft at the incisor 31 covered totally a denuded root after gingival healing.

C28 Use of a hybrid soft tissue autograft for gingival phenotype modification lingual to mandibular incisors

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Background

Gingival phenotype modification therapies to increase the gingival thickness (GT) and keratinized tissue/attached gingiva (KT/GT) on the buccal aspect of teeth have been widely reported, but the literature on lingual gingival augmentation is scarce. This case report describes the use of a hybrid soft tissue autograft with an envelope flap for phenotype modification of gingiva lingual to mandibular incisors.



Case report

A 41-year-old female presented with a chief complaint of receding gums and slight pain while brushing on the lingual aspect of mandibular anterior teeth. Attachment loss of 3-5 mm, lack of AG in tooth # 31 and 42, and thin gingiva (< 1 mm) was noted lingual to mandibular incisors. Patient was explained about the treatment plan and an informed consent was obtained. The surgical approach comprised of placing a subepithelial connective tissue graft with an epithelial collar, termed as hybrid soft tissue autograft, harvested from palate beneath the lingual flap of envelope design while leaving the keratinized epithelium exposed to oral cavity. At 18 months follow-up, a substantial gain in KT, AG and GT along with partial root coverage was achieved.

Conclusions

A hybrid soft tissue autograft with an envelope flap seems to improve the gingival phenotype on the lingual aspect of mandibular incisors. Further studies in a large number of patients with longer follow-up are needed to substantiate these preliminary observations.

C29 Split bone block and vascularized interpositional periosteal connective tissue Flap in 3D ridge augmentation: A case report

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Background

In cases in which there is not enough bone volume for the installation of dental implants combined with today's aesthetic demands, perform hard tissue grafts procedures combined with soft tissue management, become more and more often. The aim of this case report is to describe a clinical case in which a Split Bone Block (SBB) technique was used in combination with a Vascularized Interpositional Periosteal Connective Tissue Flap (VIP-CT) for a 3D ridge augmentation of an anterior maxillary area.



Case report

A 30-year-old female patient was referred for an implant restoration in the left upper canine area. A Cone Beam CT scan was taken which revealed a 3D osseous deficiency. A mucoperiosteal envelope incision and detachment was executed. Following the graft removal from mandibular ramus, the block was cut into two thin pieces with a disc and the remain bone was milled, so that it could be used as particulated bone blocks were loosely fixed from the vestibular and palatine canine area with two 1.5 x 10mm osteosynthesis screws and the particulated bone was inserted into the gap among the plates. Subsequently, a conjunctival pedicled graft (VIP-CT) was rotated from the ipsilateral palate in order to cover the autogenous graft. The wound was closed with a 5-0 polypropilene suture, which was removed after 15 days. After 7 days there was an intercurrence with suture failure, exposing the connective tissue graft that continued to protect the bone graft. After 3 months, it was possible to observe the incorporation of hard and soft tissue grafts, being possible to plan the implant and provisional crown with the aid of digital flow to prototyped surgical and provisional guide, and after 6 months the PMMA provisional crown was installed.

Conclusions

The autogenous grafts provide predictable results, and when bone and soft tissue grafts are combined, impressive results can be achieved.