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Is tooth form a major criterion during correction of anterior esthetic-functional disharmony? Case report of complex prosthetic-driven surgery-including approach

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Abstract

Background. Retainment of biologically-argumented relationship between surrounding periodontium and teeth restored with different kinds of prosthetic restorations is highly important predictive factor for long-termed clinical and functional success of complex dental rehabilitation, especially in cases when treatment is focused on the corrections of present anterior esthetic-functional disharmony.

Objective. To represent possibilities of complex prosthetic-driven surgery-including approach applied for the treatment of esthetic-functional disharmony, while using tooth form as major criterion for successful outcome planning.

Case report. This clinical case describes a prosthetically driven rehabilitation approach integrating digital planning, provisional restorations, and bone recontouring surgery to achieve optimal esthetic and functional outcomes. Comprehensive diagnostics encompassed cone-beam computed tomography (CBCT), intraoral scanning, and standardized smile photographic protocol to evaluate hard and soft tissue parameters. Surgical intervention involved gingivectomy, ostectomy, and osteoplasty performed according to the contours predetermined by the provisional restorations, ensuring a prosthetically-driven approach for the hard tissue modification. Laboratory-fabricated provisional restorations were utilized to establish a new reference of cemento-enamel junction (CEJ), which served as a critical guide for subsequent bone management procedures. Definitive zirconia restorations were fabricated based on the digital design files of the provisional restorations, ensuring precise transfer of the planned teeth morphology. During one-year follow-up patient demonstrated stable esthetic outcomes, healthy periodontal conditions, and functional occlusal relationships. This case underscores the effectiveness of digitally guided planning combined with close interdisciplinary collaboration among the prosthodontist, oral surgeon, and dental technician in managing complex anterior rehabilitations. Pivotal component contributing to treatment success was the reproduction of new CEJ on the provisional restorations in conjunction with a vertical preparation technique, which facilitated controlled soft tissue adaptation and long-term stability.

Conclusion. Integration of advanced digital workflows with biologically-oriented preparation techniques enables to provide precise control over gingival zenith positioning and supports prosthetically-driven surgical strategies in complex anterior esthetic-functional rehabilitations. Provisional restorations are pivotal for shaping the emergence profile and guiding soft tissue maturation, while the use of multilayer zirconia frameworks and digital impression protocols ensures optimal biocompatibility, accuracy, and marginal integrity. Present case report highlights that the synergy between digital planning, meticulous provisionalization, and close clinician-laboratory collaboration is a critical determinant of long-term stability, esthetic harmony, and patient satisfaction.

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Introduction

Anterior esthetic-functional disharmony represents a multifactorial clinical condition that compromises both smile esthetics and oral function, often involving discrepancies in tooth morphology, gingival architecture, occlusal relationships, and phonetics [1, 2, 3]. Successful management requires a comprehensive, interdisciplinary approach that integrates diagnostic, surgical, prosthetic, and digital workflows [3, 4, 5].

Retention of biologically-argumented relationship between surrounding periodontium and teeth restored with different kinds of prosthetic restorations is highly important predictive factor for long-termed clinical and functional success of complex dental rehabilitation, especially in cases when treatment is focused on the corrections of present anterior esthetic-functional disharmony. [2, 4, 5]. In many clinical scenarios where results of previous prosthetic treatment is compromised or have been not tolerated by dental patients after some time of functioning, biologically-oriented modifications provided upon concept of eliminating anatomical crown's emergence profile and creating new one (based on the requested form of teeth and considering adapted tissue contour) seems to be the one of the most perspective clinical tactics in everyday dental practice [5, 6, 7, 8]. Nevertheless, in many cases anterior esthetic-functional disharmony is so obvious and complex that to correct such biologically-oriented preparation techniques should be coupled with surgical interventions during different stages of rehabilitation, if reliable pink-white esthetic profile aimed to be achieved as the final outcome [2, 5, 7, 8, 9].

Significant improvements within the workflow of correcting gingival contour and obtaining appropriate crown-gingival correspondence have been enhanced by the usage of modern digital dental technologies [3, 5, 7]. Coupling of data received both during intraoral scanning and cone beamed computed tomography helps to structure surgical and prosthetic stages of complex dental treatment in the most predictive manner, while minimizing the risk of iatrogenic errors occurrence. On the other hand, it should be kept in mind that even with digital technologies incorporated, hard and soft tissue biology remains to be the most centered criteria around which all the planning and intervention should be established [5, 9]. So, digital dental technologies play just the role of instrument which helps to objectify present biological parameters and based on such demarcate further clinical manipulations that may be provided

without compromising the outcome by non-predictable tissue remodeling in the area of interest [1, 2, 4]. New concept of guided periodontal surgery with the use of surgical guides of adapted design significantly improves the control within periodontal-restorative interface by forming a reliable bridge between the surgical and prosthetic phases during complex dental rehabilitation applied for the anterior esthetic-functional disharmony cases [1, 3, 5, 7].

Publishing case reports that document the management of anterior esthetic-functional disharmony is essential for advancing evidence-based clinical practice in restorative and prosthetic dentistry. Because of complexity of such clinical scenarios, standardized protocols are often insufficient, and clinicians rely heavily on shared clinical experience and documented outcomes to guide decision-making. Furthermore, published reports contribute to the collective understanding of treatment longevity, complications, and patient-centered outcomes, offering valuable real-world evidence and background for the successful complex treatment of anterior esthetic-functional disharmony.

Objective

To represent possibilities of complex prosthetic-driven surgery-including approach applied for the treatment of esthetic-functional disharmony, while using tooth form as major criterion for successful outcome planning.

Clinical case presentation

29 years old female patient presented with chief complaints regarding unaesthetic appearance and insufficient length of her veneers, which were already functioning for several years (Fig. 1).

Comprehensive diagnostic protocol included: cone-beam computed tomography (CBCT), standardized photo protocol with intraoral and extraoral images for further smile and facial analysis, intraoral scanning (to generate digital models), 3D facial scanning. All obtained diagnostic data was coupled and integrated into specialized digital planning software to determine the optimal design parameters and ideal length of the maxillary anterior teeth. Complex analysis of all obtained data served as a prerequisite for the development of functionally-driven and aesthetically justified treatment plan (Fig. 2).



Figure 1. Initial situation of patient who referred with complaints on the unaesthetic appearance of veneers

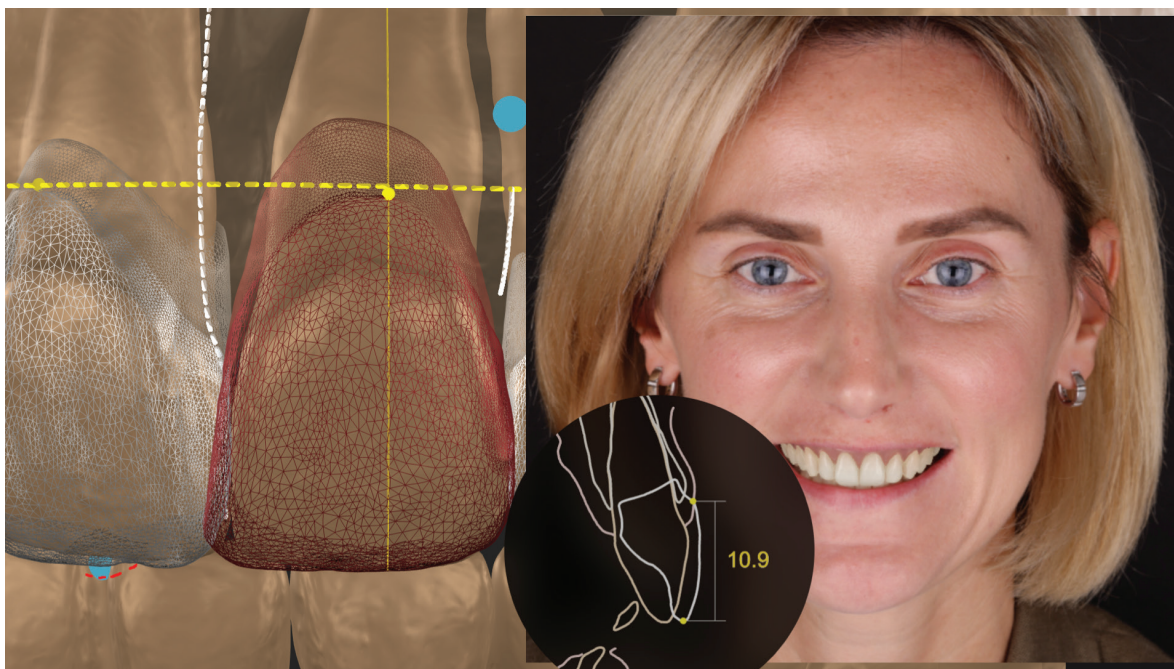


Figure 2. Complex analysis of all obtained diagnostic data (CBCT, photo, intraoral scan)

Patient was diagnosed with comprehensive aesthetic-functional disharmony of the maxillary anterior region manifested by disproportions and asymmetry of the anterior dental arch within the smile zone. Among different proposed treatment plans patient has chosen one with esthetical crown lengthening after changes that can be obtained through complex treatment were demonstrated to her. Patient has agreed on all needed interventions, including surgical ones, and signed corresponding consent agreement form.

After approving definitive digital smile design with the patient, all the diagnostic data was transferred to the dental laboratory, where dental technician performed the following steps:

1. Digital soft tissue correction – virtual adjustment of gingival zenith positions and reduction of gingival volume to simulate clinical

crown lengthening and surgical plastic procedures.

2. Design of new anterior teeth based on aesthetic principles including establishment of esthetically pleasant parameter of tooth length, width-to-height ratio, interproximal contacts, and surface morphology.

3. Fabrication of surgical guide for precise gingivectomy procedure (Fig. 3-4).

4. Fabrication of diagnostic wax-up model to serve as a reference during clinical procedures.

First stage of clinical procedure included guided gingivectomy procedure, which was performed to establish proper gingival contour according to the planned design, using the surgical template (Fig. 5-6).



Coslet JG, Vanarsdall R, Weisgold A. Diagnosis and classification of delayed passive eruption of the dentogingival junction in the adult. Alpha Omega. 1977 Dec;7(37):24-8

Figure 3. Design of surgical guide considering periodontal aspects and future form of teeth

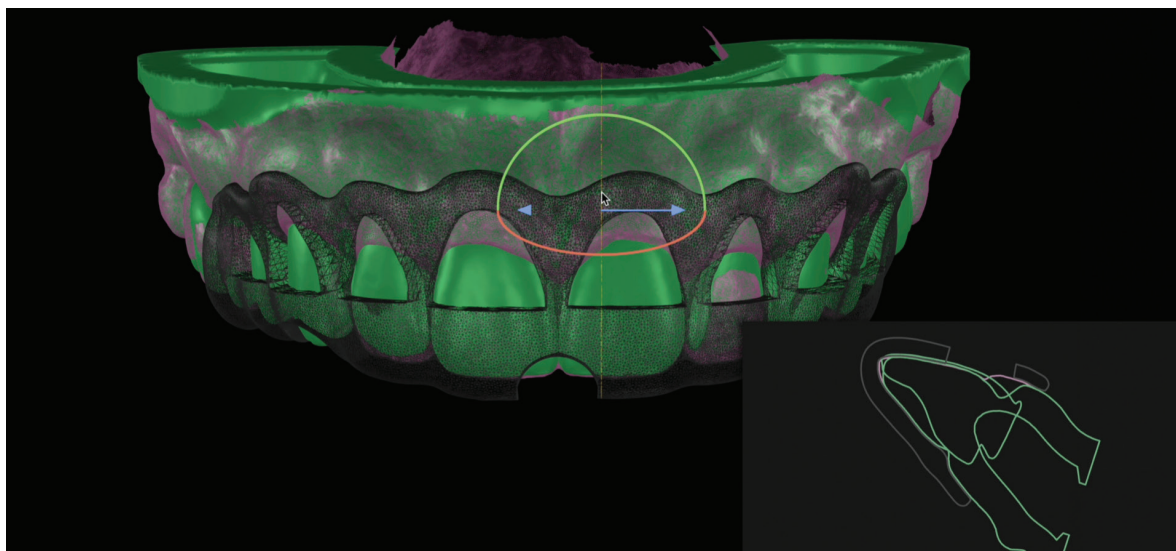


Figure 4. Design of surgical guide considering periodontal aspects and future form of teeth



Figure 5. Gingivectomy procedure provided with the usage of surgical guide



Figure 6. Gingivectomy procedure provided with the usage of surgical guide. The next step

Simultaneously, the existing prosthetic restorations were removed, and the maxillary teeth were prepared for provisional restorations. Based on preoperative digital planning and diagnostic wax-up, laboratory has fabricated provisional restorations within six days, accurately reproducing the pre-planned morphology, proportions, aesthetic parameters and new cemento-enamel junction (CEJ), which would serve as a reference for the prosthetically driven surgery (Fig. 7-8).

Second stage of clinical procedure included surgical correction of bone architecture. This stage was held following the placement of the provisional restorations with full-thickness mucoperiosteal

flap approach. The zenith positions of the provisional restorations served as the reference for the osseous recontouring. Vertical tooth preparation and leveling of the individualized CEJs enabled alignment of all the new CEJs at the projection of each tooth into single horizontal plane, overcoming the pre-existing discrepancies.

Considering newly established CEJ level osteoplasty was performed to achieve appropriate bone level for the desired gingival contour. Flap was then sutured, and patient underwent two-month healing period under close clinical monitoring (Fig. 9-10).



Figure 7. Preparation of teeth with vertical preparation teeth approach



Figure 8. Provisionalization step after gingivectomy



Figure 9. Osteotomy provided with the reference of newly formed cemento-enamel junction

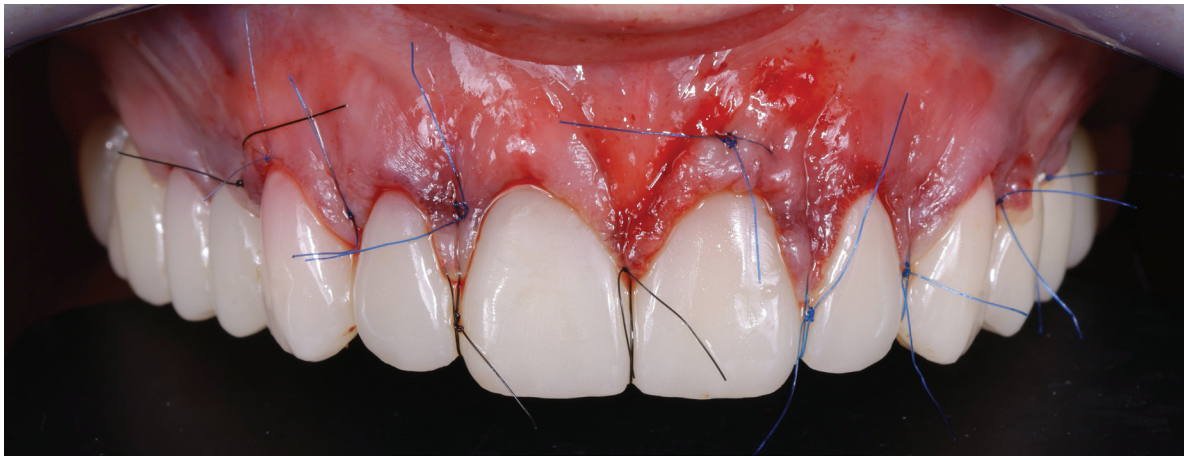


Figure 10. Clinical view right after finishing osteotomy procedure and suturing

At the third clinical stage after the two-month healing period, functional diagnostics were performed using a computerized axiograph to plan a full-mouth reconstruction (Fig. 11).

The assessment included analysis of mandibular movements, maximal mouth opening, centric occlusion, and functional occlusal dynamics

during mastication. This data served as the basis for the individualized design of the definitive restorations. Additionally, functional reassessment allowed to evaluate patient's adaptation to the provisional restorations and to identify necessary occlusal adjustments prior to definitive work, thereby enhancing the predictability and longevity of the final result (Fig. 12).



Figure 11. Clinical view two months after osteotomy procedure



Figure 12. Diagnostics with digital axiograph

Fourth clinical stage included transition to the definitive prosthetic treatment, which required accurate digital scanning of the maxilla. Since the previous surgical correction was guided by the contours of the provisional restorations, it was crucial to maintain the biologic width established after osteoplasty. Particular care was taken to avoid apical displacement of the gingival margin during retraction cord placement for final tooth preparation. Zirconia-based restorations with ceramic veneering were selected as definitive restoration due to their high biocompatibility with the gingival tissues. The subgingival zirconia surface (0.5 mm) was left polished without glazing or

veneering due to its superior biocompatibility.

The definitive restorations were tried in to confirm all esthetic aspects, including shape, color, and harmony with the smile line (Fig. 13).

After approval of all parameters the zirconia-ceramic restorations were cemented using glass ionomer cement, which provides durable adhesion, marginal seal, and long-term stability.

Two weeks after cementation, gingiva has shown stable healing and harmonious integration with the restorations. No signs of inflammation, edema, or recession were observed (Fig. 14).



Figure 13. Try-in of definitive restorations



Figure 14. Appearance two weeks after definitive restorations cementation



Figure 15. Appearance one year after definitive restorations cementation

Restorative-gingival interface was smooth, with precise marginal adaptation. Color, shape, and translucency remained stable, indicating correct material selection and high-quality cementation. The patient reported no discomfort during function, and occlusion remained balanced. Follow-up photo registration and functional assessment confirmed high quality performance of definitive restorations.

At the one-year follow-up clinical parameters remained stable, with full preservation of the aesthetic and functional properties of the restorations (Fig. 15).

Zirconia crowns layered with ceramic maintained their color, gloss, and translucency without signs of wear or deformation. The gingiva remained healthy and stable, with no signs of inflammation, recession, or hyperplasia. The gingival contours around the restorations were harmonious. Functional evaluation confirmed stable occlusal relationships and uniform load distribution. The patient reported full comfort during chewing and speech. Patient was advised to maintain excellent oral hygiene with interdental aids and irrigators and to undergo professional hygiene procedures at least every six months to retain obtained functional and esthetic outcomes for the long-term perspective.

Discussion

Present case report demonstrates successful results of anterior esthetic-functional disharmony treatment, which was realized through complex prosthetic-driven surgery-including approach for which form of future restorations was chosen as a main criterion of patient-centered outcome. Nevertheless, treatment protocol described in present case report has followed all the principal biological periodontal considerations to achieve the maximum predictability in all the provided manipulations.

It should be highlighted that nowadays patients are eager to obtain better esthetic outcomes by changing original form of teeth even if procedures of esthetic crown lengthening require surgical intervention along the way of complex rehabilitation [5, 10, 11, 12, 13]. Our team has provided sociological survey via the social media Instagram platform to evaluate current esthetic preferences among patients, involving more than 7,300 respondents. Participants were asked to choose between two digitally simulated designs of anterior teeth that were identical in morphology, but differed in crown length. In the first design the tooth length was adapted to the existing gingival line, while in the second design the gingival contour was digitally modified to harmonize with elongated restorations.



Figure 16. Preferences to longer anterior teeth among 7,300 respondents while choosing between different options for the treatment of anterior esthetic functional disharmony

The results revealed that 93% of respondents preferred the design featuring longer anterior teeth, indicating a pronounced esthetic inclination toward increased crown length even at the expense of modifying gingival architecture (Fig. 16).

These findings underscore the importance of incorporating patient-centered esthetic preferences into the digital planning phase of anterior rehabilitations. Considering such preferences while determining the ideal tooth proportions and gingival zenith positions may improve both patient satisfaction and the predictability of the final esthetic outcome [10, 11, 13].

Lee et al. have proposed classification system for the cases requiring esthetic crown lengthening based on needed interventions, within which authors differentiate cases that may be corrected only with gingivectomy (usually includes cases, where gingiva has enlarged on the background of specific medication intake), gingivectomy coupled with immediate provisionalization approach at the first stage and osteotomy at the second stage (for cases with sufficient keratinized tissue parameters for the gingivectomy, but latter may violate biologic width), and cases for which osteotomy should be provided at the first stage and gingivectomy coupled with immediate provisionalization at the second stage (for cases with high alveolar crest position) [5, 9]. Also, the cases with the lack of keratinized tissue may be treated with the use of apically positioned flap approach [5, 9]. Presented case report corresponds to the type 2 of Lee's classification, since gingivectomy coupled with immediate provisionalization approach was provided at the first stage and osteotomy at the second stage.

Previous systematic review demonstrated that procedure of crown lengthening surgery provides stable contour of surrounding periodontal tissue in means of no regressive changes noted for bone level, pocket depth and supracrestal tissue attachment levels in long term perspective [14]. On the other hand in several previous studies it was mentioned that evidences linked with favored results of esthetic crown lengthening were quite heterogeneous in range of potential positive periodontal changes [14, 15]. Considering this it may be stated that case reports on esthetic crown lengthening play a critical role in disseminating detailed diagnostic and therapeutic workflows that are essential for predictable outcomes in the anterior region. They allow clinicians to document and share integrated approaches combining digital smile design, periodontal-biologic assessment, and surgical crown lengthening aspects with subsequent prosthetic rehabilitation. Such reports provide insight into innovative protocols involving gingival and osseous recontouring, soft tissue conditioning, and CAD/CAM-guided restorations, which are often underrepresented in large-scale studies. Furthermore, they contribute valuable real-world evidence on the long-term stability of gingival architecture, complication rates, and patient-centered esthetic outcomes, thereby expanding the clinical knowledge base and guiding best practices in periodontal-prosthetic interdisciplinary care.

Results obtained within the study of Agustin Panadero et al. are

highly correlative with such obtained in present case report [16]. Even though the study sample and monitoring term in prospective clinical research were greater, the tendency noted in both the study and case report are the same: biologically-driven approaches may be interpreted as acceptable options for the cases where esthetic emergence profile of the frontal teeth should be improved [16].

Surgical guides demonstrated to be a reliable practical tool for predictable crown lengthening procedures in means of forming more control both for the gingivectomy procedure and osteotomy manipulations [2, 7]. Meanwhile, during planning procedures considering focus on the patient-centered outcomes clinician should choose between different design of guides to guarantee maximum accuracy and trueness of provided procedure in relation to previously established plan of treatment [17]. Randomized clinical trial of Borham et al. demonstrated that usage of surgical guides for the esthetic crown lengthening help to decrease surgery time, while the wound healing period, pain scores and stability of gingival margins were the same between surgical guide approach and free hand approach [2]. Workflow for the treatment of esthetic-functional disharmony may be enhanced by the usage of multifunctional anatomic prototypes, which originally were developed for the differential diagnosis of excessive gingival display, but essential design of such focused on driving surgical procedures based on the personalized patient's need and desired outcomes [18].

During the complex rehabilitation of anterior esthetic-functional disharmony it is highly important to provide sufficient time for soft tissue maturation during the provisionalization stage before fixing definitive restorations [5, 9]. Such period may take from 8 to 12 weeks depending on the gingival response, and even later while providing definitive restoration an attempt may be taken to fix such first on the temporary cement and only after some time – upon glass-ionomer cement or dual composite luting agents [16]. Lee et al. pointed out that understanding of healing time duration also may be considered as factor of success for the crown lengthening procedures [5, 9]. Authors highlighted that soft tissue healing may take up to 6 weeks if the gingivectomy was provided with laser, while it may differ if procedure was provided with other surgical way. On the other hand, osteoplasty procedures may provoke the need in 3 months remodeling and maturation [5, 9]. Relative long term of provisionalization stage may be interpreted as kind of disadvantage of biologically-oriented approaches for prosthetic rehabilitation, while on the other side such may be interpreted as price which should be paid for strategically-important stability of surrounding gingiva within the years ahead perspective [16].

Usage of polished zirconium margin rather than coverage of such with glazed ceramics may also be interpreted as an approach to support stable surrounding tissue position [16]. In vitro study on cell cultures provided by Brunot-Gohin et al. demonstrated that ceramics surface treatment by polishing provides better

conditions for epithelial cell adhesion and proliferation compared to glazed samples [19]. Literature review provided among dental implants' abutments samples made of titanium and zirconium have established that latter one characterized with valuable biological perspective and with comparable soft tissue integration pattern and biocompatibility values [20]. In clinical study of Linkevicius T. it was demonstrated that modified design of screw-retained implant-borne restorations with maximized contact between zirconium and surrounding gingival margin helps to minimize the risks of vestibular recession development and increasing probing depth [21]. Polishing of zirconium not only improves its biological features regarding forming contact with surrounding gingiva, but also enhances its flexural strength, chipping resistance, and translucency, and considering this facts polishing of zirconium may be interpreted as "best post-proc assessing method for enhancing zirconia's surface quality and mechanical properties without compromising its load-bearing capacity", which was mentioned within comprehensive review [22]. Previous prospective clinical study demonstrated that zirconia full-covered crowns may be used as reliable option for prosthetic rehabilitation of patients treated with biologically oriented preparation approach, helping to achieve 100% soft tissue stability, increase in surrounding gingival thickness and high level of patients' satisfaction both for single crowns and fixed partial denture scenarios [16]. On the other hand it should be kept in mind that polished surface is more prone for the biofilm accumulation and protein adhesion, which may provoke clinical signs of gingival inflammation and soft tissue altered appearance. On the other hand latest in vitro study evaluated that both polishing and glazing of zirconium surface have no significant impact on biofilm formation [23], so the discussion remains to be active on this topic.

Even though prosthetic-driven complex surgery-including approach demonstrated unique outcomes in obtaining appropriate gingival thickness and esthetic improvements, constant patient-provided hygienic maintenance remains to be an important component of the long-termed success [16]. Ignorance of need in periodical professional hygiene procedure, while also non-compliance with daily oral hygiene routine may compromise final outcome in shorter period than expected. Prospective clinical study with two years of monitoring found that variation in periodontal parameters after biologically-driven zirconia-cored prosthetic rehabilitation relies on adequate hygiene maintenance with statistically approved manner [16]. So, appropriate home oral hygiene measures and periodical professional hygiene procedures remain to be the key approaches to facilitate gingiva-esthetic performance around dental restorations, if latter characterized either with polished or glazed zirconium subgingival margin.

Nowadays some of the phases included into complex diagnostic protocol of esthetic-functional disharmony may be provided not only within digital environment per se, but also with the use of modern artificial intelligence driven approaches, which optimizes time expenditures and accuracy for needed measurements of site-specific periodontal phenotype [18, 24].

Conclusion

Combination of modern digital technologies and traditional vertical preparation approaches allows to control precise and symmetrical positioning of gingival zeniths on both provisional and definitive restorations, thereby enabling prosthetically driven surgical interventions for the complex esthetic-functional disharmony treatment considering new positions of formulated CEJ level. The use of polished multilayer zirconia frameworks with ceramic veneering ensured excellent gingival biocompatibility and optimal soft tissue integration, while digital intraoral scanning combined with a controlled retraction technique provides high precision in impression taking and an accurate marginal fit of the restorations. Provisional restorations play pivotal role in conditioning the emergence profile and shaping the gingival contour prior to placement of the definitive prostheses. Stepwise approach, incorporating functional diagnostics, follow-up appointments, and strict adherence to oral hygiene recommendations, contributed to

the long-term stability, harmonious aesthetics, and patient comfort. This clinical case illustrates how the integration of digital planning, meticulous provisionalization, and close collaboration between the clinician and the dental laboratory serves as a key determinant of success in complex aesthetic rehabilitations held within the anterior maxillary region.

Ethical aspects

Authors confirm that they have followed all relevant ethical norms and requirements during the treatment described within present case report and preparation of present manuscript. Authors obtained full patient's agreement regarding publication of following case report, and such was approved by corresponding consent form signed by the patient personally. No information in present case report may disclose any personal data about the patient, which further may be used for patient's personal identification. Any information related to patient's identity disclosure was either deleted or anonymized within present case report.

Authors confirm that they have followed CARE guidelines while preparing present case report with intention for further publication.

Conflict of Interest

Author does not have any potential conflict of interests that may influence the decision to publish this article.

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Чи є форма зуба основним критерієм під час корекції естетико-функціональної дисгармонії у фронтальній ділянці? Звіт про клінічний випадок комплексного підходу, що включає хірургію, керовану протетичним плануванням

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A – розробка концепції та дизайну дослідження, B – збір та або систематизація даних дослідження, C – аналіз та тлумачення даних дослідження, D – написання публікації,
E – критичне доопрацювання тексту публікації, F – остаточне затвердження.

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Ключові слова:
цифрове планування посмішки;
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на пацієнта

Анотація

Background. Збереження біологічно обґрунтованого співвідношення між тканинами пародонту і структурами зубів, які відновлюються різними видами ортопедичних конструкцій, є надзвичайно важливим прогностичним чинником довготривалого клінічного та функціонального успіху комплексної дентальної реабілітації, особливо у випадках, коли лікування спрямоване на корекцію наявної естетико-функціональної дисгармонії у фронтальній ділянці.

Мета. Представити можливості комплексного підходу, що поєднує хірургічне втручання, кероване протетичним плануванням, для лікування естетико-функціональної дисгармонії, використовуючи форму зуба як основний критерій успішного планування результату.

Звіт про клінічний випадок. У цьому клінічному випадку представлено протетично керований підхід до реабілітації, що поєднує цифрове планування, використання тимчасових реставрацій та хірургічну реконтуруючу остеопластику для досягнення оптимальних естетичних і функціональних результатів. Комплексна діагностика включала конусно-променеву комп'ютерну томографію (КПКТ), внутрішньоротове сканування та стандартизований фотопротокол для оцінки параметрів твердих і м'яких тканин. Хірургічне втручання передбачало проведення гінгивектомії, остеоєктомії та остеопластики відповідно до контурів, визначених тимчасовими реставраціями, що забезпечувало протетично керований підхід до модифікації твердих тканин. Лабораторно виготовлені тимчасові реставрації використовувалися для встановлення нового рівня цементно-емалевої межі (ЦЕМ), яка слугувала критичним орієнтиром для подальших маніпуляцій із кістковою тканиною. Постійні реставрації із діоксиду цирконію виготовлялися на основі цифрових файлів тимчасових конструкцій, що забезпечувало точну передачу запланованої морфології зубів. Під час річного спостереження пацієнт демонстрував стабільні естетичні результати, здоровий пародонтальний статус і гармонійні оклюзійні співвідношення. Цей клінічний випадок підкреслює ефективність цифрового планування у поєднанні з тісною міждисциплінарною співпрацею між ортопедом, хірургом-стоматологом і зубним техніком у веденні складних реабілітацій у фронтальній ділянці. Вирішальним чинником, що сприяв успішному результату лікування, було відтворення нової цементно-емалевої межі на тимчасових реставраціях у поєднанні з технікою вертикальної препарувки, яка забезпечила контрольовану адаптацію м'яких тканин і їхню довготривалу стабільність.

Висновки. Інтеграція сучасних цифрових робочих процесів із біологічно орієнтованими техніками препарування забезпечує точний контроль над позицією ясеневого зеніту

та підтримує протетично керовані хірургічні стратегії у випадках складних естетико-функціональних реабілітацій фронтальної ділянки. Тимчасові реставрації відіграють ключову роль у формуванні профілю виходу та спрямуванні дозрівання м'яких тканин, тоді як використання багат шарових каркасів із діоксиду цирконію та цифрових протоколів отримання відбитків забезпечує оптимальну біосумісність, точність і крайову герметичність. Представлений клінічний випадок підкреслює, що синергія між цифровим плануванням, ретельною роботою з тимчасовими конструкціями та тісною співпрацею між клініцистом і зуботехнічною лабораторією є визначальними чинниками довготривалої стабільності, естетичної гармонії та задоволення пацієнта результатом лікування.

Заява про конфлікт інтересів

Цим автори підтверджують відсутність зв'язку з будь-якою організацією чи компанією, яка може мати будь-який фінансовий або нефінансовий інтерес до матеріалів дослідження, розглянутих в цій статті.

Заява про фінансування

Не було отримано жодного фінансування для допомоги в підготовці та проведенні цього дослідження, а також для написання цієї статті.

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