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Aesthetic Camouflage of a Complex Malocclusion Using Lithium Disilicate Laminate Veneers and a Zirconia Fixed Dental Prosthesis: A Clinical Case Report

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Abstract

Complex malocclusion poses an aesthetic and restorative challenge when dental irregularities, discoloration, and abnormal interarch relationships coexist. Although orthodontic treatment addresses the underlying malocclusion, selected patients may opt for restorative camouflage to improve dental aesthetics.

A 51-year-old female patient presented with irregularly positioned teeth and generalized yellowish discoloration. Clinical examination revealed a unilateral right-sided buccal crossbite involving teeth 12-17, without functional mandibular displacement. The anterior interarch relationship was asymmetric, with a 1-mm reverse overjet and 2-mm reverse overbite on the right side and positive overjet and overbite of 1 mm and 2 mm, respectively, on the left. The mandibular dental midline was deviated towards the patient's left relative to the maxillary midline, with bilateral Angle Class II canine and molar relationships. Additional findings included congenital absence of the maxillary right central incisor (11) and an unfavorable periodontal prognosis of the mandibular right central incisor (41), necessitating extraction. Rehabilitation involved lithium disilicate laminate veneers and a three-unit zirconia fixed dental prosthesis (FDP) to improve tooth color, morphology, and apparent alignment. The treatment was directed towards aesthetic camouflage rather than orthodontic correction of the underlying malocclusion. At the one-year follow-up, the restorations remained clinically intact, with no evidence of fracture, chipping, or debonding, although the pre-existing crossbite persisted.

This case demonstrates the role of an individualized prosthodontic approach in the aesthetic management of complex malocclusion when orthodontic correction is not pursued. Careful assessment of periodontal health, restorative space, and occlusal loading is essential to ensure appropriate treatment planning and restorative prognosis.

Categories: Public Health, Quality Improvement, Dentistry
Keywords: ceramic veneers, complex malocclusion, digital smile design, esthetic camouflage, prosthodontic rehabilitation, zirconia crowns

Introduction

Dental aesthetics influence patient satisfaction, while irregular tooth positioning, discoloration, and abnormal interarch relationships may compromise smile appearance. Crossbite is characterized by an abnormal buccolingual relationship between opposing teeth and may have dental, skeletal, or functional origins. It may involve the anterior or posterior segments, affect an isolated tooth or multiple teeth, and occur with or without functional mandibular displacement. In the present case, the malocclusion was classified as a unilateral right-sided segmental crossbite involving both anterior and posterior components (12-17), without functional mandibular displacement. Orthodontic management depends on the etiology and extent of the discrepancy and may involve removable appliances for localized dental corrections, fixed orthodontic appliances for controlled tooth movement, or maxillary expansion procedures for transverse skeletal deficiencies. In adults, treatment selection also considers skeletal maturity, periodontal condition, and functional requirements. Although orthodontic treatment addresses the underlying malocclusion, selected patients who decline orthodontic intervention may opt for restorative camouflage to improve dental aesthetics by modifying tooth morphology, proportions, and apparent alignment. However, this approach does not correct the underlying transverse discrepancy and requires careful consideration of occlusal relationships and patient expectations [1].

Lithium disilicate laminate veneers improve tooth color, morphology, proportions, and apparent alignment while preserving sound tooth structure when clinically feasible. Systematic reviews have reported favorable long-term survival of ceramic laminate veneers, although fracture, chipping, and debonding remain potential complications [2,3]. Clinical outcomes are influenced by preparation design and adhesive

procedures, particularly the preservation of enamel, which provides a favorable bonding substrate [4,5]. In patients with marked tooth malposition or crossbite, restorative camouflage therefore requires careful evaluation of available restorative space, anticipated crown contours, periodontal implications, and occlusal loading.

Zirconia fixed dental prosthesis (FDP) may be indicated when full-coverage restoration is required by the structural condition of the tooth. Although zirconia FDP demonstrates favorable clinical survival, loss of retention, material fracture, and biological complications have been reported [6]. Combining ceramic veneers and zirconia crowns may be appropriate when individual teeth have different restorative requirements; however, the indication for each restoration should be based on the remaining tooth structure, preparation requirements, periodontal condition, and functional demands. Importantly, restorative camouflage improves dental appearance but does not necessarily correct the underlying malocclusion.

This case report describes the aesthetic prosthodontic rehabilitation of a 51-year-old female patient presenting with irregularly positioned teeth, generalized yellowish discoloration, and complex malocclusion. Clinical assessment revealed a unilateral right-sided buccal crossbite involving teeth 12-17, without functional mandibular displacement, accompanied by an asymmetric anterior interarch relationship (1-mm reverse overjet and 2-mm reverse overbite on the right side, with positive overjet and overbite of 1 mm and 2 mm, respectively, on the left), bilateral Angle Class II canine and molar relationships, and mandibular dental midline deviation towards the patient's left. Associated findings included congenital absence of tooth 11 and an unfavorable periodontal prognosis of tooth 41, necessitating extraction. Rehabilitation was accomplished using lithium disilicate laminate veneers and a three-unit zirconia FDP to improve tooth color, morphology, proportions, and apparent alignment. The treatment focused on aesthetic camouflage rather than comprehensive orthodontic correction of the underlying malocclusion. This case highlights the importance of individualized prosthodontic treatment planning, with careful consideration of periodontal health, restorative space, and occlusal relationships when using restorative camouflage to manage complex malocclusion.

Case Presentation

A 51-year-old female patient presented to the clinic with a chief complaint of irregularly positioned teeth and yellowish discoloration, which adversely affected the appearance of her smile. Her primary concern was to improve dental aesthetics through restorative treatment. The patient's medical and dental histories were reviewed, and a comprehensive extraoral and intraoral examination was performed before treatment planning.

Intraoral examination revealed irregular tooth positioning, generalized yellowish discoloration, and a unilateral right-sided buccal crossbite involving the maxillary right lateral incisor through the second molar (12-17). The crossbite involved both anterior and posterior segments, without associated functional mandibular displacement, as determined by clinical assessment of mandibular closure and occlusal relationships (Figures *1A*-*1B*).



FIGURE 1: Preoperative and postoperative clinical view

A: Preoperative right lateral intraoral view; B: preoperative left lateral intraoral view; C: preoperative frontal view of the three-dimensional digital intraoral scan; D: intraoral scanning of the right side after tooth preparation; E: intraoral scanning of the left side after tooth preparation; F: provisional restoration; G: postoperative right lateral intraoral view; H: postoperative left lateral intraoral view; I: postoperative extraoral smile demonstrating the aesthetic outcome following restorative treatment.

Congenital absence of the maxillary right central incisor (11) was identified during the clinical examination, contributing to an altered anterior dental arrangement and aesthetic concern. The treatment plan considered the patient's preference to avoid extensive tooth preparation and endodontic treatment for replacement of the missing tooth; therefore, an individualized restorative camouflage approach was selected to improve anterior tooth morphology, proportions, and apparent alignment. The mandibular right central incisor (41) exhibited Grade III mobility according to Miller's classification, indicating severely compromised periodontal support and an unfavorable prognosis. Consequently, extraction was considered indicated and performed. The adjacent mandibular central and lateral incisors (31 and 42) demonstrated satisfactory clinical periodontal and structural conditions and were considered suitable abutments for the planned three-unit zirconia FDP. The remaining dentition was evaluated for periodontal health, structural integrity, existing restorations, and suitability for definitive prosthodontic rehabilitation (Figures *1A*-*1B*).

The primary treatment objective was to enhance dental aesthetics through improvement of tooth color, morphology, proportions, and apparent alignment while camouflaging the visible discrepancies associated with the existing malocclusion. Comprehensive orthodontic correction was not pursued because the patient declined orthodontic treatment. The patient was informed of the proposed restorative approach, its limitations, and available alternatives, including the persistence of the underlying occlusal discrepancy. Written informed consent was obtained before initiating treatment. Restorative contours were planned with consideration of the existing interarch relationship and the potential for unfavorable occlusal loading on the definitive restorations.

Digital intraoral scans using an intraoral scanner (3Shape TRIOS, Copenhagen, Denmark) and clinical photographs were used for the diagnosis and treatment planning, along with the clinical findings for the prosthodontic rehabilitation (Figures *1A*-*1C*). A tooth-specific restorative plan was developed, taking into consideration the clinical condition of each tooth, the desired aesthetic outcome, available restorative space, periodontal status, and anticipated occlusal contacts. Lithium disilicate glass-ceramic laminate veneers (IPS e.max CAD; Ivoclar, Schaan, Liechtenstein) were planned for the teeth 12, 13, 14, 21, 22, 23, 24, 32, 33, 34, 43, and 44 to improve tooth color, facial contours, proportions, and apparent alignment. Congenital absence of the maxillary right central incisor (FDI 11) was identified during the pretreatment examination. No specific restorative replacement or orthodontic intervention was undertaken to manage the missing tooth. The existing anterior tooth arrangement was maintained, and no separate procedure was performed to correct the associated dental midline discrepancy or anterior asymmetry. The prosthodontic treatment was directed towards improving the appearance of the remaining dentition without attempting to reconstruct the missing central incisor.

The teeth were prepared using a conservative incisal-overlap preparation design for lithium disilicate laminate veneers. Facial reduction of approximately 0.6 mm was performed in two planes, with an incisal reduction of approximately 1.5 mm to provide adequate restorative space. The preparation was extended palatally by approximately 1.0 mm, terminating in a shallow chamfer finish line. All internal line angles were rounded, and the preparation margins were smoothly finished to minimize stress concentration and facilitate accurate adaptation of the ceramic restorations. Enamel preservation was prioritized throughout

the preparation to optimize adhesive bonding and long-term restoration retention. Interproximal extension was determined by the tooth position and the desired contour of the restoration. In view of the pre-existing crossbite, the proposed veneer contours were evaluated in relation to maximum intercuspation (MIP) and mandibular functional movements. Particular consideration was given to the possibility of premature contacts or unfavorable loading of the ceramic, especially on the mandibular canine and premolar veneers. The preparation design was intended to provide sufficient restorative space without unnecessary removal of sound tooth structure or creation of excessive facial contour.

A three-unit zirconia FDP was fabricated using IPS e.max ZirCAD (Ivoclar, Schaan, Liechtenstein) to replace the missing tooth 41, with teeth 31 and 42 serving as abutments. The abutment teeth were prepared for full-coverage zirconia retainers with anatomically guided reduction, smooth transitions, and rounded internal line angles, targeting at least 0.8 mm of labial, lingual, and 1.0 mm incisal reduction and a continuous rounded shoulder finish line approximately 0.8 mm wide. The preparation was assessed for adequate restorative space, margin continuity, and a suitable path of insertion. The relationship between the prepared abutments, the planned pontic, and the opposing dentition was evaluated to minimize the risk of unfavorable static and dynamic contacts. The restorative design was intended to replace the extracted tooth and contribute to the overall aesthetic outcome without claiming correction of the pre-existing crossbite.

Following tooth preparation, digital impressions of the prepared teeth and surrounding dentition were obtained using an intraoral scanner (3Shape TRIOS, Copenhagen, Denmark) (Figures *1D*-*1E*). The digital scans were used to record the prepared tooth surfaces, finish-line configurations, interproximal relationships, and occlusal anatomy for the design and fabrication of the provisional restorations. The scans also facilitated evaluation of the available restorative space and the relationship between the prepared teeth and the opposing dentition, particularly in view of the pre-existing crossbite. The restorations were digitally designed using the CAD software (3Shape Dental System, 3Shape A/S, Copenhagen, Denmark) and fabricated using the CAM unit (PrograMill Dry milling unit, Ivoclar, Schaan, Liechtenstein), according to the manufacturer's recommended protocols.

Following tooth preparation, provisional polymethyl methacrylate (PMMA) restorations (IPS Telio CAD; Ivoclar, Schaan, Liechtenstein) were fabricated and placed on teeth 14, 13, 12, 21, 22, 23, 24, 34, 33, 32, 31, 41, 42, 43, and 44 using an eugenol-free temporary cement (GC Freegenol; GC Corporation, Tokyo, Japan) (Figure *1F*). The provisionals were evaluated for marginal adaptation, contour, occlusal contacts, and patient comfort during the fabrication of the definitive restorations.

Following a satisfactory period of provisional restoration of three months, the definitive restorations were planned. Tooth shade selection was subsequently performed using the VITA 3D-MASTER shade guide (VITA Zahnfabrik, Bad Säckingen, Germany) to determine the appropriate shade for the definitive ceramic restorations. The contours, dimensions, and occlusal parameters of the provisional restorations were evaluated and used as a reference for the fabrication of the definitive restorations to ensure continuity in form, function, and esthetics. The restorations were milled from their respective material blanks. Following milling, the lithium-disilicate restorations underwent crystallization firing, whereas the zirconia FDP underwent sintering according to the manufacturer's recommended processing protocols. The restorations were subsequently finished and polished, and their marginal adaptation, contours, proximal contacts, and occlusal relationships were evaluated before clinical placement.

Before definitive cementation, the occlusion was evaluated in MIP and during protrusive and lateral excursions, with particular attention to the restored teeth in the right-sided crossbite region. Identified premature contacts were selectively adjusted, and minor ceramic contour corrections were performed using fine-grit diamond instruments (approximately 30 µm). The adjusted surfaces were subsequently polished using a ceramic-specific polishing system (ZiLMaster HP polishing system, Shofu Inc., Kyoto, Japan) to restore surface smoothness.

The intaglio surfaces of the lithium disilicate ceramic veneers (IPS e.max CAD; Ivoclar, Schaan, Liechtenstein) were etched with 9% hydrofluoric acid gel (Porcelain Etch; Ultradent Products, Inc., South Jordan, Utah, USA) for 20 seconds, followed by cleaning with 37% phosphoric acid (Total Etch; Ivoclar, Schaan, Liechtenstein) for 60 seconds. After rinsing and drying, a silane coupling agent (Monobond Plus; Ivoclar, Schaan, Liechtenstein) was applied for 60 seconds. The prepared tooth surfaces were isolated using a rubber dam (OptraDam Plus; Ivoclar, Schaan, Liechtenstein) and etched with 37% phosphoric acid for 30 seconds, followed by rinsing and drying. The adhesive agent (ExciTE F DSC; Ivoclar, Schaan, Liechtenstein) was applied and light-cured for 20 seconds. The veneers were then seated using a light-curing resin cement (Variolink Veneer; Ivoclar, Schaan, Liechtenstein). Following removal of excess cement, the restorations were light-polymerized for 20 seconds per surface, and the margins were subsequently inspected, and any residual cement was removed.

The internal surface of the three-unit zirconia FDP (IPS e.max ZirCAD; Ivoclar, Schaan, Liechtenstein) was airborne-particle abraded with 110-µm aluminum oxide particles at a pressure of 1 bar before cementation. The prepared abutment teeth were cleaned using a prophylaxis paste (Proxyt; Ivoclar, Schaan, Liechtenstein), rinsed thoroughly with water, and gently air-dried, avoiding desiccation of the dentin. The

FDP was cemented using a conventional glass-ionomer luting cement (Vivaglass CEM; Ivoclar, Schaan, Liechtenstein), prepared by mixing one drop of liquid with one scoop of powder according to the manufacturer's instructions. The cement was applied to the internal surface of the FDP, which was seated with gentle pressure. Excess cement was removed immediately after seating.

Postoperative clinical photographs demonstrated improved color uniformity, tooth morphology, proportions, and apparent alignment of the restored dentition. The restorations contributed to a more harmonious visual appearance of the anterior teeth and improved overall smile aesthetics (Figures *1G*-*1I*). These findings represented an aesthetic outcome rather than evidence of comprehensive occlusal correction. The postoperative occlusion was therefore evaluated separately in MIP and during protrusive and lateral movements.

The combined use of lithium-disilicate laminate veneers and a zirconia FDP provided an individualized restorative approach to improving tooth color, morphology, proportions, and apparent alignment in a patient with complex malocclusion. This case demonstrates the potential role of prosthodontic rehabilitation in addressing aesthetic concerns when comprehensive orthodontic treatment is not pursued. However, restorative camouflage does not correct the underlying occlusal discrepancy, as the pre-existing right-sided crossbite remained following treatment. Careful evaluation of periodontal health, restorative space, and occlusal relationships is essential when selecting this treatment approach. Long-term clinical follow-up is necessary to assess the functional performance, periodontal compatibility, and durability of the restorations.

A structured follow-up schedule was established at 1 week and 1, 3, 6, and 12 months after definitive cementation, followed by annual reviews. At each visit, the restorations were evaluated for marginal integrity, retention, fracture, chipping, debonding, surface defects, secondary caries, and periodontal health. Occlusal assessment included the distribution of contacts in MIP and evaluation of anterior and posterior guidance during mandibular excursions, with particular attention to working- and non-working-side interferences involving the restorations. At the one-year follow-up, the ceramic veneers and three-unit zirconia FDP demonstrated satisfactory clinical integrity, without evidence of fracture, chipping, or loss of retention. The pre-existing right-sided crossbite persisted, consistent with the treatment objective of aesthetic camouflage rather than comprehensive orthodontic or occlusal correction. The patient reported satisfaction with the improvement in tooth color, apparent alignment, and overall smile aesthetics and has been quantified using a 10-point visual analog scale (VAS), with a score of 9/10 recorded at the one-year follow-up.

Discussion

The aesthetic management of complex malocclusion requires balancing the patient's expectations with the biological and functional requirements of restorative treatment. In the present case, irregular tooth positioning, discoloration, a right-sided crossbite, and congenital absence of the maxillary right central incisor created a multifactorial restorative challenge. Although orthodontic treatment would have addressed tooth position and the underlying occlusal relationship, the patient declined orthodontic treatment and elected restorative rehabilitation after being informed of the proposed approach and its limitations. However, restorative camouflage should be regarded as an aesthetic compromise rather than an equivalent substitute for orthodontic correction, because changes in tooth morphology and apparent alignment do not necessarily resolve the underlying dental, skeletal, or functional discrepancy. Orthodontic correction is generally the preferred treatment for posterior crossbite because it addresses the underlying transverse discrepancy rather than merely modifying the clinical appearance of the dentition. A Cochrane systematic review by Ugolini et al. demonstrated the effectiveness of orthodontic expansion procedures, particularly in children and adolescents, while highlighting the limited evidence available regarding orthodontic management in adults [1]. In the present case, comprehensive orthodontic treatment was discussed; however, the patient declined this option and preferred an aesthetic restorative approach. Consequently, ceramic laminate veneers and a zirconia FDP were selected to improve dental appearance while maintaining the existing interarch relationship. This approach was intended as aesthetic camouflage rather than correction of the underlying malocclusion. The patient was informed that the crossbite would persist and that restorative treatment could not substitute for orthodontic correction. Careful consideration of restorative contours and occlusal contacts was therefore essential to minimize unfavorable loading and potential complications.

The combination of lithium-disilicate ceramic laminate veneers and a zirconia FDP allowed different restorative strategies to be selected according to the clinical requirements of individual teeth. Lithium-disilicate ceramics are widely used for laminate veneers because of their aesthetic properties and compatibility with adhesive bonding. Systematic reviews have demonstrated favorable clinical survival of ceramic veneers, although fracture, chipping, debonding, marginal deterioration, and biological complications remain possible [2,3]. A systematic review and meta-analysis published in 2025 reported a pooled survival estimate of 96.81% for lithium-disilicate laminate veneers at a mean follow-up of approximately 10.4 years [7]. These findings support the use of lithium-disilicate veneers for appropriately selected teeth; however, survival estimates derived from heterogeneous clinical studies should not be interpreted as a prediction of the outcome of an individual case involving complex malocclusion. A

prospective clinical trial with long-term follow-up also demonstrated that ceramic veneer outcomes depend on factors such as the bonding substrate and preparation characteristics, reinforcing the importance of case selection and careful adhesive procedures [8].

Preservation of enamel was an important consideration in the present case because reliable adhesive bonding is central to the clinical performance of ceramic veneers. Gurel et al. reported a substantial association between dentin involvement at preparation margins and veneer failure, with veneers bonded to dentin exhibiting a markedly higher risk of failure than those bonded to enamel [4]. More recently, a systematic review and meta-analysis found higher survival and success rates for veneers bonded to enamel than for restorations involving extensive dentin exposure [5]. Accordingly, an enamel-preserving preparation approach was adopted wherever clinical conditions permitted, with approximately 0.6 mm of facial reduction used as a planning target and the preparation individualized according to tooth contour and restorative requirements. Nevertheless, preparation depth alone does not establish the amount of enamel available for bonding. The final adhesive prognosis also depends on the actual residual enamel, margin location, substrate conditioning, isolation, and cementation technique. The pre-existing tooth malposition and crossbite made these considerations especially important because excessive facial reduction or overcontoured restorations could compromise periodontal compatibility and restorative contours.

The mandibular right central incisor (41) was replaced with a three-unit tooth-supported zirconia FDP, using teeth (31 and 42) as abutments. Both abutments demonstrated satisfactory clinical periodontal and structural conditions. Zirconia was selected as the framework material for the definitive restoration. Evidence from systematic reviews indicates that tooth-supported zirconia FDPs demonstrate acceptable clinical survival; however, complications such as ceramic chipping, framework fracture, and loss of retention remain relevant considerations [9]. Accordingly, abutment condition, connector dimensions, prosthesis design, and occlusal loading require careful consideration to support the long-term clinical performance of multi-unit restorations. Systematic reviews comparing monolithic and porcelain-veneered zirconia FDPs have demonstrated that material configuration influences technical complications [10,11]. In particular, chipping remains an important concern for bilayer zirconia restorations, while longer-term evidence for monolithic zirconia prostheses remains comparatively limited [11]. The restorative design and its material-specific requirements should therefore be clearly documented when interpreting the clinical outcome of this case.

Cementation and occlusal management were integral components of the treatment strategy. The lithium disilicate veneers were adhesively bonded, whereas the zirconia FDP was conventionally cemented using glass ionomer luting cement [12]. Given the persistence of the right-sided crossbite, particular attention was directed towards occlusal assessment. Clinical evaluation demonstrated coincidence between centric relation (CR) and MIP, without detectable mandibular deflection during closure. Occlusal contacts were further assessed during lateral excursions, particularly in the crossbite region, to identify premature contacts and potential excursive interferences. Any identified premature contacts were selectively adjusted, with minor ceramic contour corrections performed before definitive cementation, followed by polishing of the adjusted surfaces. Although the rehabilitation improved the apparent alignment and morphology of the restored dentition, the underlying transverse discrepancy remained uncorrected, consistent with the treatment objective of aesthetic camouflage rather than comprehensive orthodontic correction.

Digital intraoral scanning, CAD/CAM fabrication, and standardized shade selection formed part of the restorative workflow. Digital records facilitated assessment of the prepared teeth, restorative space, and proposed contours, while CAD/CAM technology supported fabrication of the definitive ceramic restorations. Nevertheless, the use of a digital workflow does not independently establish superior clinical performance; accurate margin capture, appropriate material processing, verification of proximal contacts, and clinical evaluation of occlusion remain necessary. At the one-year follow-up, the patient reported satisfaction with the improvement in tooth color, apparent alignment, and overall smile aesthetics, assigning a score of 9/10 on a 10-point VAS. Such patient-centered outcomes are clinically relevant, although reports of satisfaction are more informative when complemented by validated patient-reported outcome measures and standardized clinical assessments [13].

The present case provides a clinically relevant illustration of individualized prosthodontic management for a patient with complex malocclusion who elected restorative treatment rather than comprehensive orthodontic correction. The clinical outcome was evaluated in terms of aesthetic improvement, restoration integrity, periodontal compatibility, and the persistence of the pre-existing crossbite. Although the findings are specific to an individual patient and do not establish comparative effectiveness relative to orthodontic treatment, they demonstrate the clinical considerations involved in selecting and delivering restorative camouflage in a complex occlusal situation. The one-year follow-up provides an initial assessment of the restorations' clinical performance, while continued monitoring will be important to establish their longer-term durability and functional behavior. Future reports incorporating standardized aesthetic assessments, validated patient-reported outcome measures, and objective occlusal analysis may further strengthen the evaluation of similar treatment approaches.

This case report is limited by its single-patient design and one-year follow-up, restricting generalizability and assessment of long-term restorative outcomes. Furthermore, the pre-existing right-sided crossbite

remained uncorrected, and the congenitally missing maxillary right central incisor (11) was not independently rehabilitated; consequently, the associated anterior midline discrepancy persisted. Within these limitations, the case provides practical insight into patient-centered treatment planning, material selection, and the importance of clearly defining the benefits and boundaries of restorative camouflage. Longer-term follow-up is necessary to evaluate the durability and stability of the restorations.

Conclusions

This case describes the prosthodontic rehabilitation of a patient with unilateral right-sided buccal crossbite (12-17), bilateral Angle Class II canine and molar relationships, congenital absence of the maxillary right central incisor (11), and an unfavorable periodontal prognosis of the mandibular right central incisor (41). The combined use of lithium disilicate laminate veneers and a zirconia FDP provided an individualized restorative approach to improving dental aesthetics while maintaining the existing interarch relationship. At the one-year follow-up, the restorations demonstrated satisfactory clinical integrity, without fracture, chipping, or loss of retention, and the patient reported satisfactory aesthetic outcomes. However, the underlying crossbite and associated anterior midline discrepancy remained uncorrected. This case highlights the role of patient-centered treatment planning, conservative tooth preparation, appropriate material selection, and careful occlusal assessment when orthodontic treatment is declined. Continued monitoring is essential to evaluate long-term restorative and periodontal outcomes.

Additional Information

Author Contributions

All authors have reviewed the final version to be published and agreed to be accountable for all aspects of the work.

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Disclosures

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