Brazilian Dental Science

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UNIVERSIDADE ESTADUAL PAULISTA
"JÚLIO DE MESQUITA FILHO"
Instituto de Ciência e Tecnologia
Campus de São José dos Campos

ORIGINAL ARTICLE

DOI: https://doi.org/10.4322/bds.2024.e4293

Rehabilitation of a Full-Arch Patient with Cemented Metal-Ceramic Multiple Prostheses on Implants: A Case Report

Reabilitação de paciente de arco completo com Próteses Múltiplas Metalocerâmicas Cimentadas sobre Implantes – relato de caso

Adérico Santana GUILHERME[1], Yasmin Milhomens MOREIRA[2], Rhadija Victoria Mendonça MARTINS[2], Bárbara Lima de AGUIAR[2]

1 - Universidade Federal de Goiás, Faculdade de Odontologia, Departamento de Prevenção e Reabilitação Oral. Goiânia, GO, Brazil.
2 - Universidade Federal de Goiás, Faculdade de Odontologia, Curso de Graduação em Odontologia. Goiânia, GO, Brazil.

How to cite: Guilherme AS, Moreira YM, Martins RVM, Aguiar BL. Rehabilitation of full-arch patient with Cemented Metal-Ceramic Multiple Prostheses on Implants - case report. Braz Dent Sci. 2024;27(2):e4293. https://doi.org/10.4322/bds.2024.e4293

ABSTRACT

Objective: To report a clinical case of a female patient rehabilitated with Cemented Metal-Ceramic Multiple Prostheses on Implants in the upper arch. **Materials and Methods:** A multidisciplinary approach was employed, utilizing various clinical skills to achieve satisfactory outcomes in the rehabilitation of a fully edentulous patient. The treatment plan involved the use of cemented metal-ceramic prostheses, with a focus on optimizing the positioning of the crown margins to ensure periodontal health. **Results:** The use of cemented metal-ceramic multiple prostheses effectively addressed the patient's aesthetic concerns by eliminating screw access holes and ensuring the continuity of the ceramic material. The supragingival positioning of the crown margins prevented excess cement in the peri-implant sulcus, promoting periodontal health. The final prostheses provided excellent aesthetics and functionality, leading to enhanced patient satisfaction. **Conclusion:** The choice of cemented implant-supported prostheses represents a highly effective approach for treating edentulism. This method offers clinical benefits, such as increased retention and improved esthetic outcomes, while also positively impacting the patient's quality of life.

KEYWORDS

Dental implants; Dental implant-supported prosthesis; Fixed partial prosthesis; Prostheses and implants; Oral rehabilitation.

RESUMO

Objetivo: Relatar um caso clínico de uma paciente feminina reabilitada com Próteses Metálicas-Cerâmicas Cimentadas em Implantes na arcada superior. **Materiais e Métodos:** Foi empregada uma abordagem multidisciplinar, utilizando várias habilidades clínicas para alcançar resultados satisfatórios na reabilitação de um paciente totalmente edêntulo. O plano de tratamento envolveu o uso de próteses metálicas-cerâmicas cimentadas, com foco na otimização do posicionamento das margens das coroas para garantir a saúde periodontal. **Resultados:** O uso de próteses metálicas-cerâmicas cimentadas abordou efetivamente as preocupações estéticas da paciente ao eliminar os orifícios de acesso para parafusos e garantir a continuidade do material cerâmico. O posicionamento supragengival das margens das coroas preveniu o excesso de cimento no sulco peri-implantar, promovendo a saúde periodontal. As próteses finais proporcionaram excelente estética e funcionalidade, resultando em maior satisfação do paciente. **Conclusão:** A escolha de próteses suportadas por implantes cimentadas representa uma abordagem altamente eficaz para o tratamento da edentulismo. Este método oferece benefícios clínicos, como maior retenção e melhores resultados estéticos, além de impactar positivamente a qualidade de vida do paciente..

PALAVRAS-CHAVE

Implantes dentários; Prótese dentária fixada por implante; Prótese parcial fixa; Próteses e implantes; Reabilitação oral.

INTRODUCTION

The options available for rehabilitating fully edentulous patients with implant-supported prostheses vary based on the number and positioning of implants, as well as the type of retention—either removable or fixed [1]. The selection of these options depends on several factors, including the patient's clinical conditions, technical feasibility, personal preferences, and financial considerations [2]. Oral rehabilitation through the replacement of missing teeth is crucial for restoring masticatory function, occlusal stability, the maintenance of support structures, phonetics, and aesthetics. Additionally, it aims to provide comfort to the patient and restore balance to the stomatognathic system [3].

Implant-supported rehabilitations are a reliable choice for replacing single or multiple missing teeth, significantly contributing to the restoration of masticatory function and overall quality of life [4]. There are different philosophies regarding the type of final connection used in implant-supported prosthetic rehabilitations, namely screw-retained and cement-retained [5]. Generally, this choice is based on the clinical situation encountered and the preference of the professional for one system over the other. These systems can be applied in unitary, partial, or full-arch rehabilitations [6].

Literature highlights the advantages and disadvantages associated with each type of prosthetic connection. Cement-retained prostheses differ from screw-retained primarily in their retention method, where cement-retained prostheses are fixed using provisional or definitive cement, whereas screw-retained prostheses rely solely on the mechanical retention of the screw within the implant or prosthetic abutment [7].

The fabrication of cement-retained prostheses on implants follows the principles of conventional fixed dental prostheses, requiring less technical complexity and therefore being more cost-effective compared to screw-retained alternatives [7]. Among the advantages of cemented retention is its ability to compensate for discrepancies in implant positioning, achieve passive fit during seating, enhance aesthetics by eliminating screw access holes, and facilitate occlusal adjustments [8]. However, a notable drawback is the challenge of removing excess cement from subgingival areas, which can lead to the development of periodontal diseases like peri-implantitis and mucositis, posing additional risks to treatment outcomes [8].

The use of cement-retained prostheses is recommended in cases where prosthetic connections are mechanically stable, such as with Cone Morse implants, or when poorly positioned implants make screw retention difficult via the occlusal or cingulum aspects [9]. Both retention types have their advantages and limitations, underscoring the importance for clinicians to carefully select the most suitable method for each patient. Understanding the success rates and potential clinical complications associated with each retention system is crucial in making informed decisions and optimizing the success of rehabilitation treatments.

Based on these considerations, this article aims to present a clinical case report on Cemented Metal-Ceramic Multiple Prostheses on Implants, conducted as part of a specialization course in dental prosthetics with a focus on implantology at the Faculty of Dentistry, Federal University of Goiás.

MATERIAL AND METHODS

A 65-year-old female patient, partially edentulous in both the upper and lower arches, was presented to the specialization course in dental prosthetics with an emphasis on implantology at the Federal University of Goiás-School of Dentistry seeking oral rehabilitation. In the upper arch, the patient had complete rehabilitation using single-unit implant-supported prostheses screwed onto metal-resin abutments. The prostheses were supported by eight external hexagon (HE) type implants, each with a platform diameter (abutment) of 4.1 mm (Figures 1A and B). The clinical and radiographic examination indicated satisfactory osseointegration with favorable spacing and parallelism between the implants. However, the prostheses became unstable due to screw loosening, and the esthetics were compromised by resin deterioration in color and wear, leading to changes in tooth shape. Additionally, the screw access holes, especially in the anterior region, were located on the vestibular surfaces, affecting the esthetics and posing difficulties in screw access, complicating the removal of the prosthesis (Figures 2A and B).

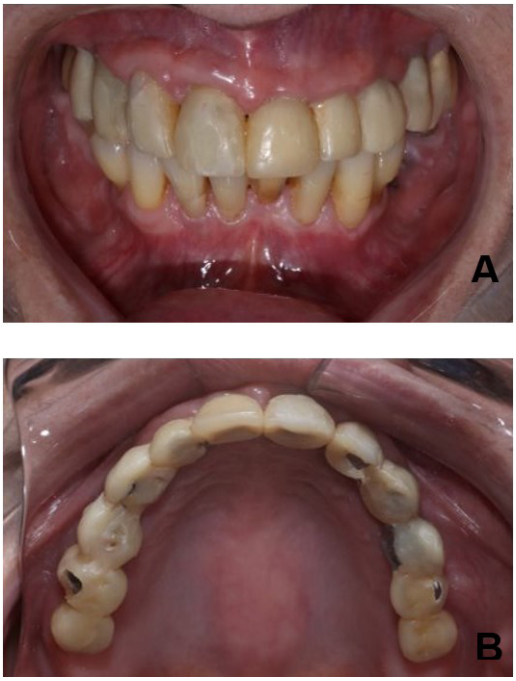


Figure 1 - (A and B) - Frontal and occlusal views of the rehabilitation condition of prostheses on single-screwed metal-resin implants supported by eight implant screws. These screws are of the external hexagon type with a platform diameter of 4.1 mm.

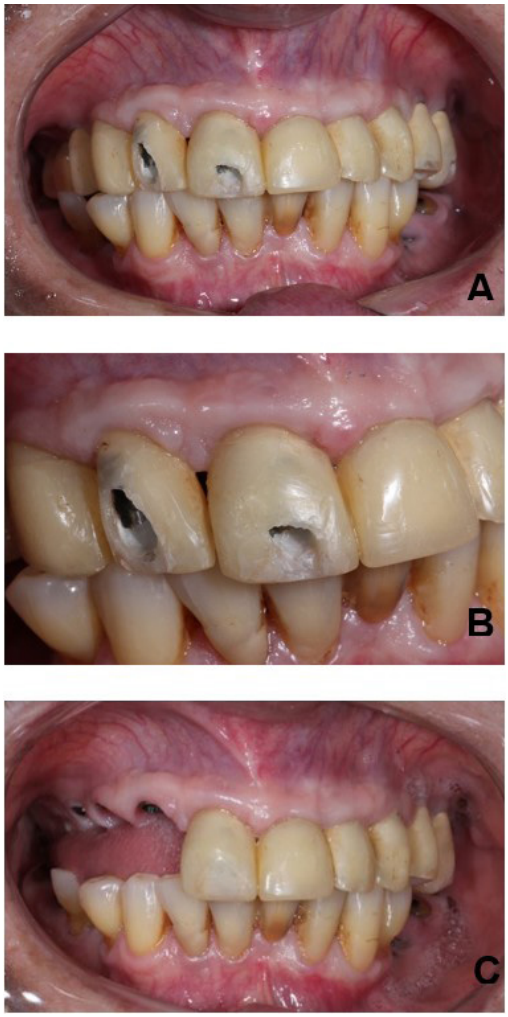


Figure 2 - Vestibular view of the openings providing access to the screws of the prostheses in the anterior region, causing aesthetic compromise and difficulty in both accessing the screws and removing the prosthesis (Figures 2A and 2B). Additionally, a view of the inter-occlusal space dimension (Figure 2C).

Initial steps included a thorough anamnesis, clinical examination, and imaging with panoramic and periapical radiographs (Figure 3). The favorable osseointegration condition of the implants was confirmed through radiographic examination and periodontal probing in the peri-implant region. Based on these findings, a rehabilitation plan was proposed.

The treatment plan involved a new rehabilitation with multiple metal-ceramic cemented prostheses instead of the previous single-unit screw-retained prostheses. This decision was influenced by the emergence of prosthesis screws outside the implant insertion axis. Opting for screw-retained prostheses might compromise esthetics due to the screws' vestibular location in future prostheses. Additionally, the external hexagon (HE) platform implants (Figure 1C) could lead to unfavorable outcomes with single-unit prostheses due to biomechanical complications, such as screw loosening and fracture. Therefore, a system of multiple cemented prostheses was chosen to avoid potential complications related to the biomechanics of single-unit screw-retained prostheses, commonly observed with external hexagon platforms.

Before any procedure, a comprehensive medical-dental evaluation was requested from the patient, along with general health supplementary exams. Preliminary impressions of the arches were then taken using irreversible hydrocolloid (Jeltrate/Dentsply – USA) to create study models for occlusion analysis, vertical and horizontal overlap, the curves of Spee and Wilson, and identification of crossbite.

The subsequent treatment plan involved several carefully planned stages. Initially, a clinical assessment was performed, followed by

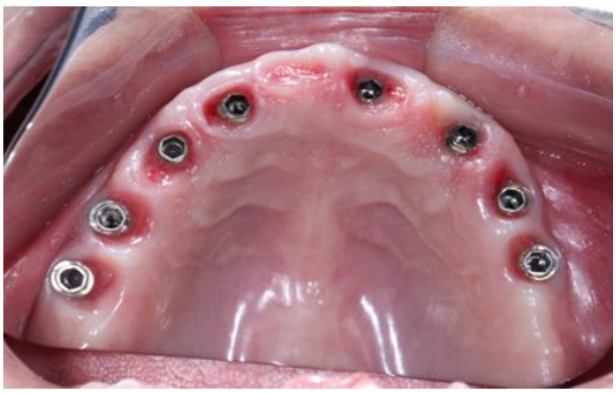


Figure 3 - Eight implant screws are of the external hexagon type with a platform diameter of 4.1 mm.

the removal of the screw-retained prosthesis. The integrity of the implant platforms, implant parallelism, periodontal health in each implant region, and inter-maxillary space dimensions were assessed (Figures 1C and 2C).

After this stage, the upper arch and implant platform molding procedure was carried out to obtain the working model. Polyether impression material (3M ESPE Impregum Soft - USA) with regular consistency was used for this, employing the drag impression technique with an individual open acrylic tray and square transfer copings.

The performed molding involved the external hexagon (HE) platforms of the implants (Figures 4A, B, and C) and the prosthetic areas of interest in the upper arch. After fixing the square transfer copings on the implant platforms using transfer guide screws and a 1.2 mm hexagonal driver, the molding procedure itself was prioritized (Figures 4A, B, and C).

To implement the technique, dental floss was initially used to create a loop between the external surfaces of the square transfer copings. Subsequently, a resin bridge was constructed over the dental floss using self-polymerizing acrylic resin (Pattern Resin LS GC – USA), employing the brush and powder-liquid resin technique [10] to promote bonding between the transfer copings (Figures 4A, B and C).

Next, the resin bridge was individualized using a biphase diamond disc (Sorensen ES/Br) attached to the straight handpiece of the micromotor. After separation, the bridge was reconnected using the same resin (Pattern Resin LS GC – USA) to mitigate the degree of resin contraction commonly observed after its polymerization.

Next, the molding process commenced with the initial application of universal adhesive (Polyether Adhesive 3M ESPE -USA) to the internal and external surfaces of the individual acrylic tray to facilitate the bonding of the molding material to the tray (Figures 4A, B, and C). The window created on the upper surface of the individual tray to access the guide screws of the transfer copings was covered with a No. 7 slice of wax sheet to contain the molding material when seating the tray on the dental arch.

After three minutes of adhesive application, the polyether impression material (Impregum Soft 3M ESPE -USA) was manipulated. The tray was filled with the impression material, and the remaining material was collected with a JON syringe (Jon Industry and Commerce –

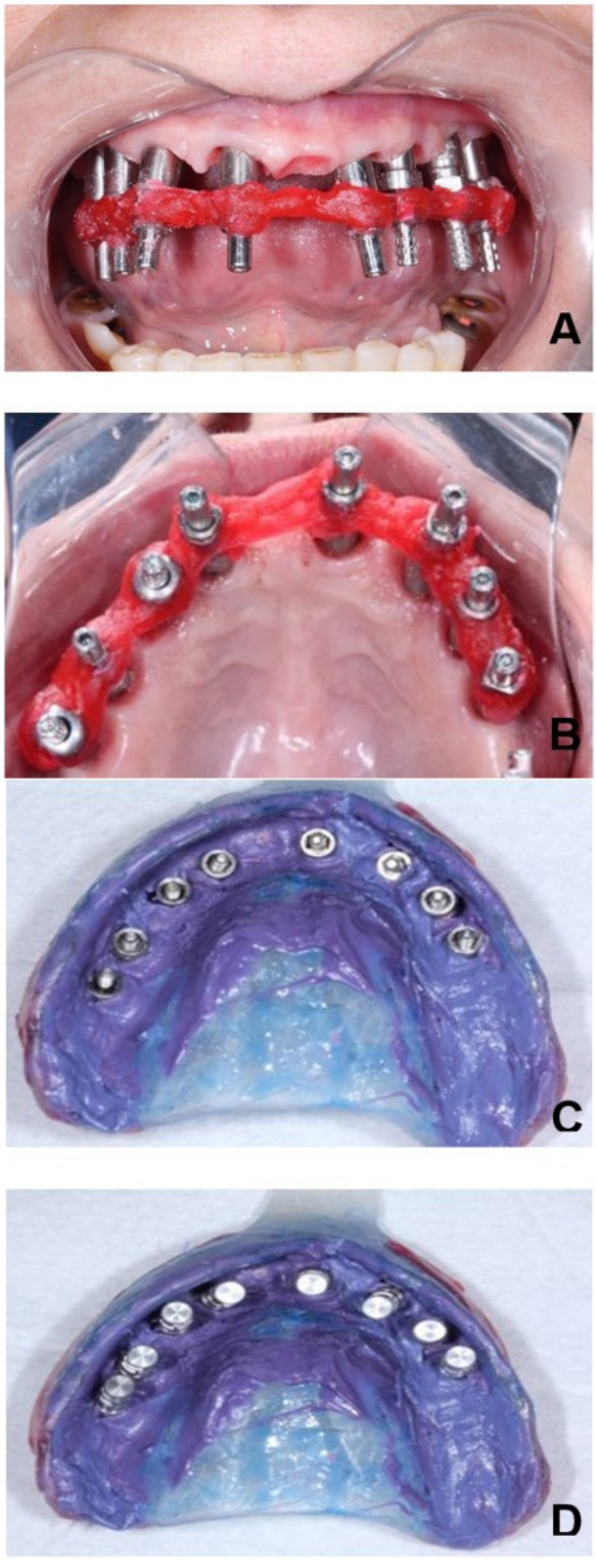


Figure 4 - Vestibular and occlusal views of the bridge created for the abutments using dental floss and autopolymerizing acrylic resin (Figures 4A and B). Individual tray and the impression obtained after removing it from the patient's mouth (Figure 4C). Mold with the analogs related to the abutments (Figure 4D).

SP/Brazil). Next, the impression material was injected around the transfer copings on both the buccal and palatal surfaces using the JON syringe. The loaded tray was then placed on the dental arch, and a six-minute wait ensued for the complete polymerization of the impression material. At the time of tray placement on the arch, the guide screws of the transfer copings, still fixed on the hexagon platforms of the implants, were passed through the wax sheet, leaving their upper surfaces exposed in the oral cavity.

After achieving the polymerization of the impression material, the guide pin screws of the transfer copings were loosened, and the mold was subsequently removed from the patient's mouth. The mold's quality was then assessed followed by its disinfection and the association of analogs with transfer copings using a 1.2mm hexagonal driver. After obtaining the mold, the union of impression copings and analogs was carried out (Figures 4A, B, C, and D). The artificial gingiva was then fabricated over the impression material and around the cervical surfaces of the impression copings. After the artificial gingiva material polymerized, which also took 6 minutes, the mold was poured with type IV special stone plaster (Herostone – Vigodent SP/Br). Once the plaster had set, which occurred after forty minutes, the guide screws of the transfer copings in the union of transfer copings and analogs were loosened with the 1.2 mm hexagonal driver, and the mold was then removed to obtain the working model (Figures 5A and B).

Next, attention was given to the maxillomandibular relationship (OVD) registration procedure. For this, bases of self-polymerizing acrylic resin (Resina Jet Clássico – SP/Br) were crafted on the working model over the analogs of the implants. Titanium cylinders, used in the fabrication of temporary prostheses, served as supports (Figure 6).

After creating the resin bases, the OVD was recorded. Initially, the crowns on implants from one of the hemi-arches were removed, and one of the resin bases was fixed on the implants in this hemi-arch (Figure 7A). In the other hemi-arch, the implant-supported prostheses were kept fixed, providing information on the height of the inter-maxillary space where the resin base was attached (Figure 7B). To obtain this record, the Nealon technique [10] was used again. Initially, the resin was brushed onto the occlusal/incisal surface of the resin base, and the patient was

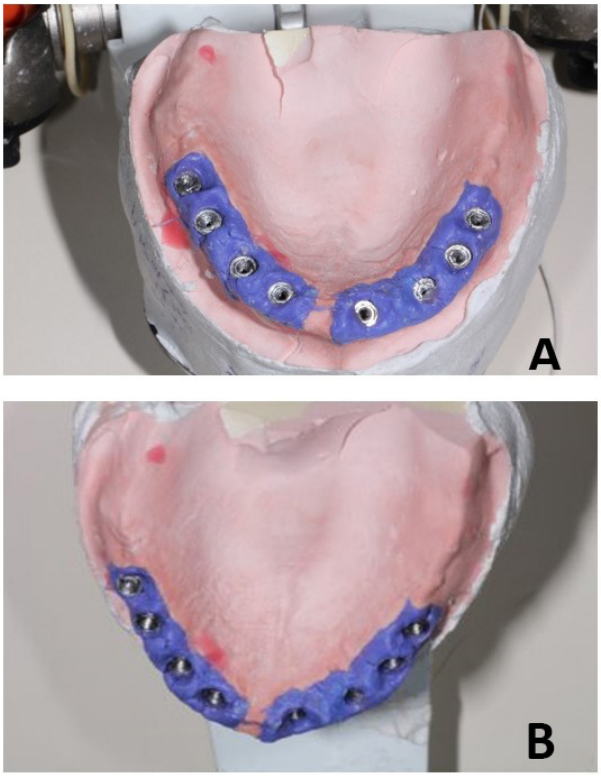


Figure 5 - (A and B) - Occlusal view of the working model with analogs of external hexagon implants with a diameter of 4.1 mm.

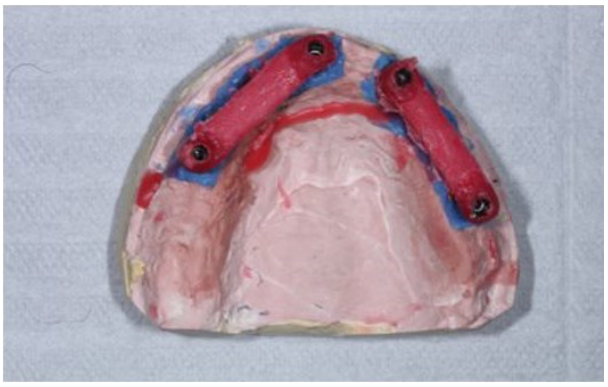


Figure 6 - Occlusal view of the working model with a self-polymerizing acrylic resin (base) for recording the maxillo-mandibular relationship.

instructed to occlude on the resin base until the resin polymerized after isolating the opposing teeth with Vaseline. The patient was kept in occlusion, and then the OVD record for one of the hemi-arches was obtained (Figure 7B). After recording the first hemi-arch, the same procedure was repeated for the other hemi-arch.

After obtaining the records, the models were mounted on the semi-adjustable articulator (ASA) with the aid of the facebow. Following the mounting, the inter-maxillary space and occlusion were evaluated. For a more accurate

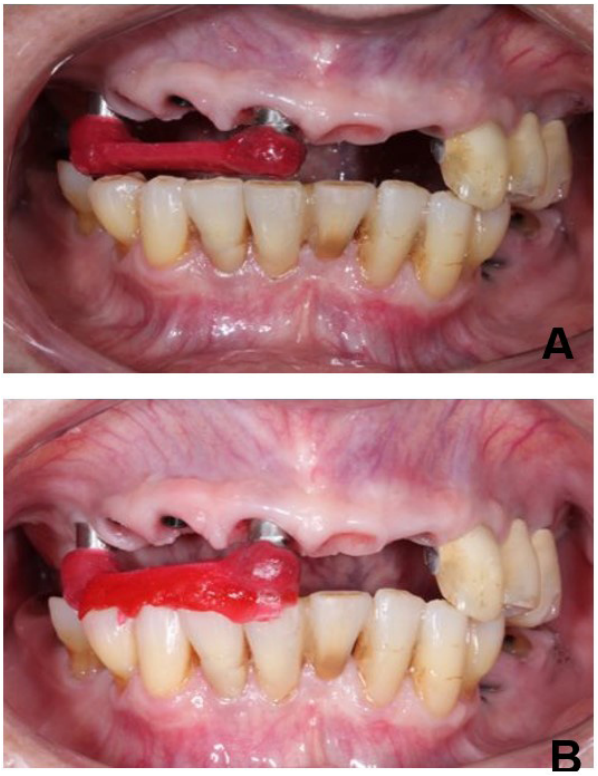


Figure 7 - View of the self-polymerizing acrylic resin base positioned over the implants and used to record the maxillo-mandibular relationship (Figure 7A). Registration was obtained in one of the hemi-arches with the addition of autopolymerizing resin onto the resin base. It is noticeable that the implant-supported prosthesis indicates the height of the intermaxillary space for obtaining the registration (Figure 7B).

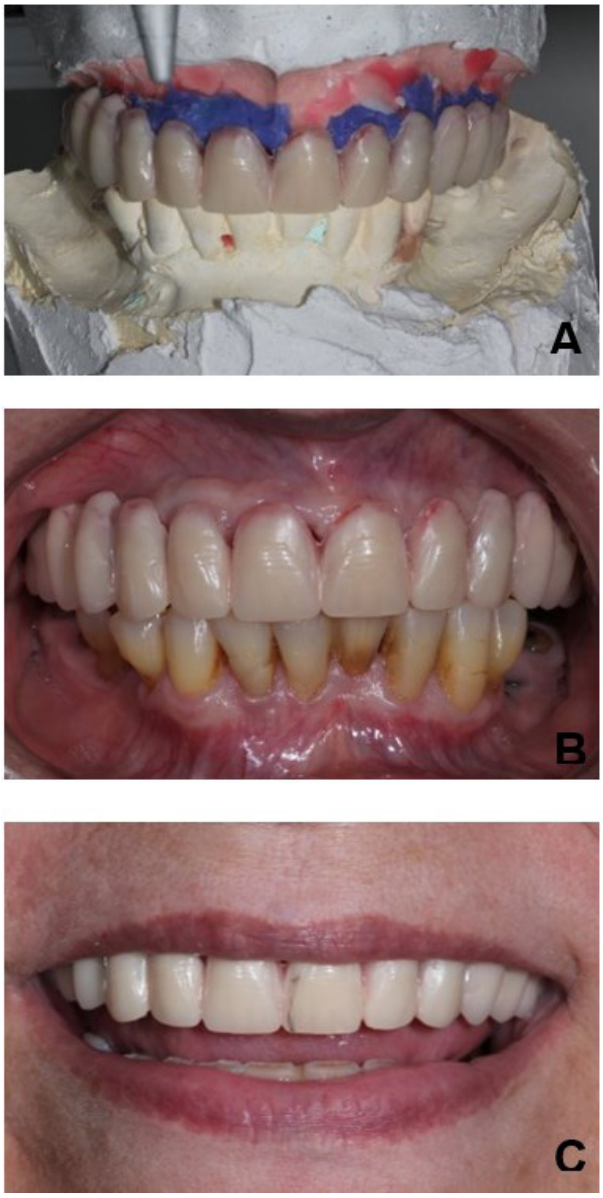


Figure 8 - View of the diagnostic setup of the future prosthesis using prefabricated teeth (Figure 8A). Placement of the prosthesis mounted on implants in the dental arch, considering the midline, dental and gingival smile, buccal corridor, lip support, tooth size, and occlusion (Figure 8B). It is possible to observe the smile height, buccal corridor, and lip support (Figure 8C).

analysis of the occlusal condition, the laboratory technician was requested to perform a diagnostic setup of the future prosthesis using Biotone prefabricated teeth (Dentsply Sirona Lab, Brazil) with screw-retained retention (Figure 8A). When the diagnostic setup was completed, it was installed on the implant platforms using a 1.2 mm hexagonal driver, allowing the fixation of screws onto the implants. After accommodating the setup in the dental arch, an assessment was made of the midline, dental and gingival smile, buccal corridor, lip support, tooth size, and occlusion (Figures 8B and C), ensuring that all these requirements were considered acceptable.

After this trial, the technician was instructed to create a silicone wall on the vestibular surface of the diagnostic setup using a dense condensation silicone material (Zetalabor Zhermack -Italy). This wall (matrix) served as a guide for the correct positioning of the abutments that were custom-made by the laboratory technician, as well as the metal frameworks of the fixed prostheses during their fabrication (Figures 9A and B) and (Figures 10A and B).

The intermediate abutments were fabricated based on the UCLA Abutment, and from these burnout cylinders, the waxing and casting process was carried out using Ni-Cr alloy (Figures 9A and B). To achieve the casting process of the abutments, information on the position of the silicone wall on the working model was used to provide information on the occlusion and esthetics. After casting the intermediate abutments, their adaptation (passive

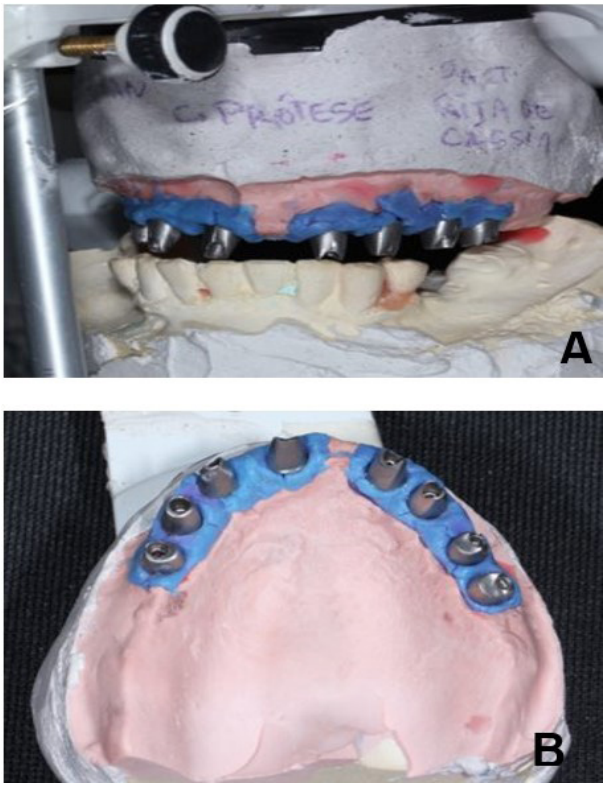


Figure 9 - (A and B) - Frontal and occlusal views of the customized abutments obtained from the UCLA abutment on the working model.

fit) was tested on the implant platforms in the patient's mouth (Figure 11). After confirming this condition, they were repositioned on the working model. Subsequently, the technician proceeded to fabricate the metal frameworks of the fixed prostheses which were cast in Ni-Cr alloy (Figures 10A, B, and C). Again, the information on the position of the silicone wall on the working model was used to preserve the information on the occlusion and esthetics obtained during the diagnostic wax-up trial.

Once the casting of the fixed prostheses was completed (Figures 10A, B, and C), a trial for them was carried out in the patient's mouth. Initially, the intermediate abutments were attached to the implants, and then the fixed prostheses were adapted to them, evaluating their passive fit.

With the adaptation certified, functional adjustments were made, taking into consideration centric movements, protrusion, and right and left lateral movements. The prosthetic structures were worn down using numbers 4138 and 3118 diamond burs in high rotation. This procedure allowed for the desired space for the ceramic material with a diameter ranging from 1.5 to 2.0 mm.

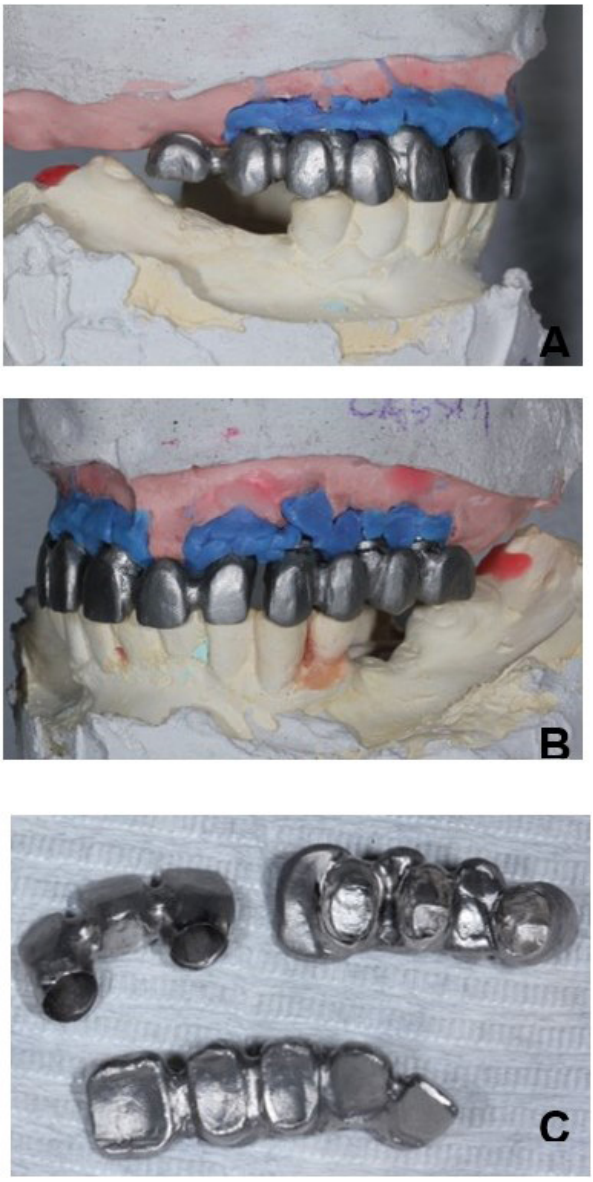


Figure 10 - (A, B, and C) - View of the metal frameworks of the fixed implant-supported prosthesis, seated on the working model after assembly in the articulator. Additionally, a view of the metal frameworks was obtained in three units.

After the functional adjustments, the procedure for recording the OVD was initiated. Initially, the metal framework of the implant-fixed prosthesis was kept seated on the implants in one hemi-arch. In the other hemi-arch, the implant-supported prostheses were kept fixed, providing information on the height of the inter-maxillary space where the metal framework of the implant-fixed prosthesis was located (Figures 12A and B).

To obtain the inter-maxillary space record (OVD), the Nealon technique [10] was used. The resin was brushed onto the occlusal/incisal surface of the metal framework of the prosthesis, and the patient was guided to occlude on the resin base until polymerization was achieved,

isolating the opposing teeth with Vaseline (Figures 13A and B). The patient was kept in occlusion, and then the OVD record for one of the hemi-arches was obtained (Figures 12A and B). After recording the first hemi-arch, the same procedure was repeated for the other hemi-arch (Figures 14 A, B and C).

After obtaining the OVD records, the transfer molding of the fixed prosthesis structures on the implants was performed using dense and fluid silicone molding material (Zetalabor Zhermack - Italy). To facilitate the transfer molding process, autopolymerizing resin powder and liquid (PATTERN - USA) were added to the vestibular surface of the prosthetic structures using a brush (Figures 12A and B). After obtaining the mold and performing disinfection, the mold was poured with type IV special stone plaster (Herostone – Vigodent SP/Br). Upon obtaining the model, it was remounted on the semi-adjustable articulator (ASA), and the ceramic material colors were selected.

Once the fixed prostheses were sent for trial in the patient's mouth with the applied ceramic material, the intermediate abutments were again attached to the implants. Next, the fixed prostheses were adapted to them, and the compatibility of the ceramic material color, occlusion, midline, and dental and gingival smile were assessed.

Subsequently, minor functional adjustments were made to the ceramic after ensuring the balance of occlusion in centric, protrusion, and right and left lateral movements using carbon paper (AccuFilm – CE USA) adapted to a Miller clamp. Next, minor functional adjustments were made to the ceramic material in centric, protrusion, and right and left lateral movements using diamond burs adapted to the straight tip of

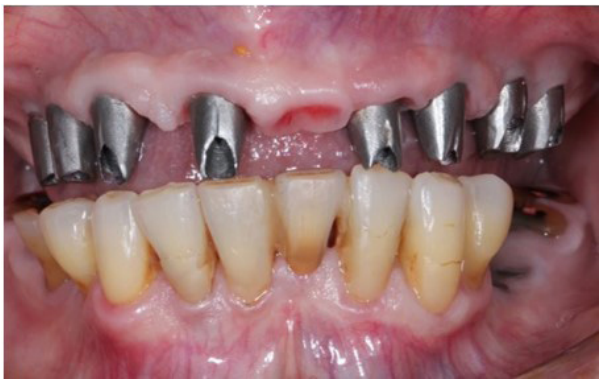
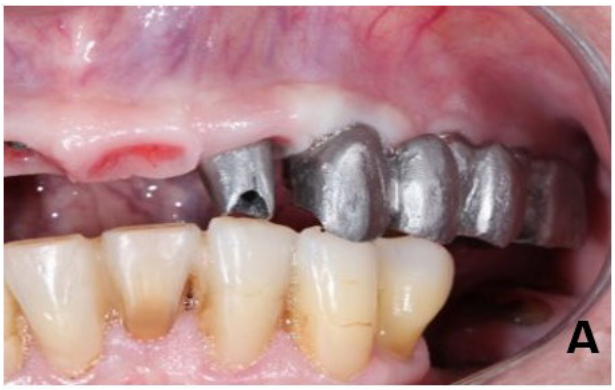


Figure 11 - View of the passive seating of the custom intermediate abutments on the implant platforms.



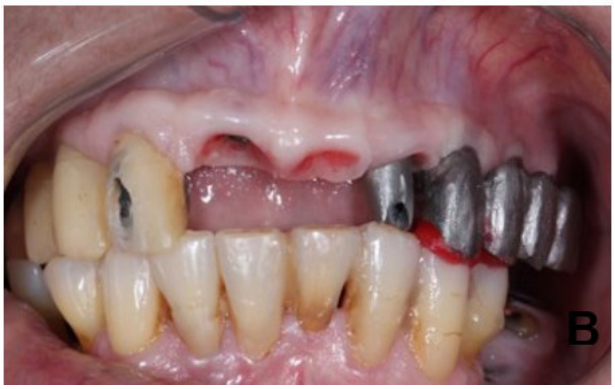
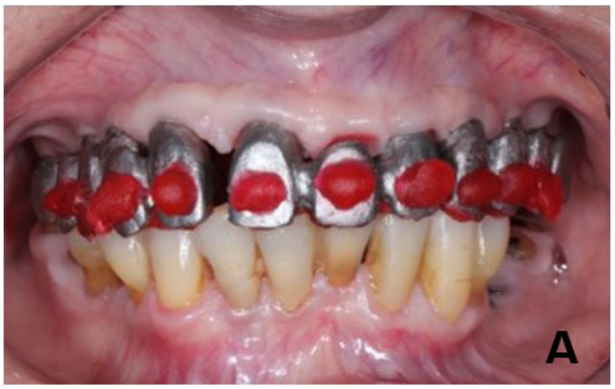


Figure 12 - (A and B) - View of the passive seating of the metal framework on the intermediate abutments and registration of the occlusal vertical dimension using autopolymerizing resin powder and liquid (PATTERN - USA).



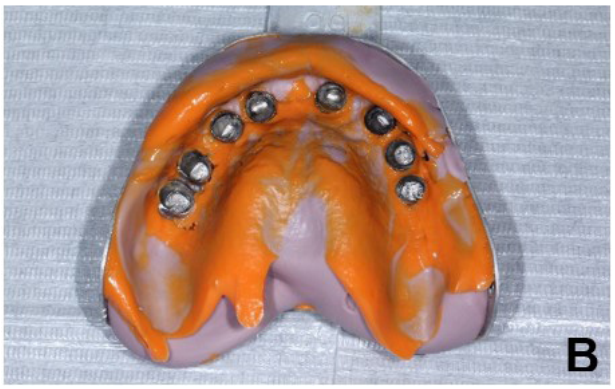


Figure 13 - (A and B) - View of the seating of the metal frameworks of the prostheses and the addition of autopolymerizing resin powder and liquid (PATTERN - USA) on the vestibular surface. The impression was obtained using condensation silicone (Zetalabor Zhermack - Italy).

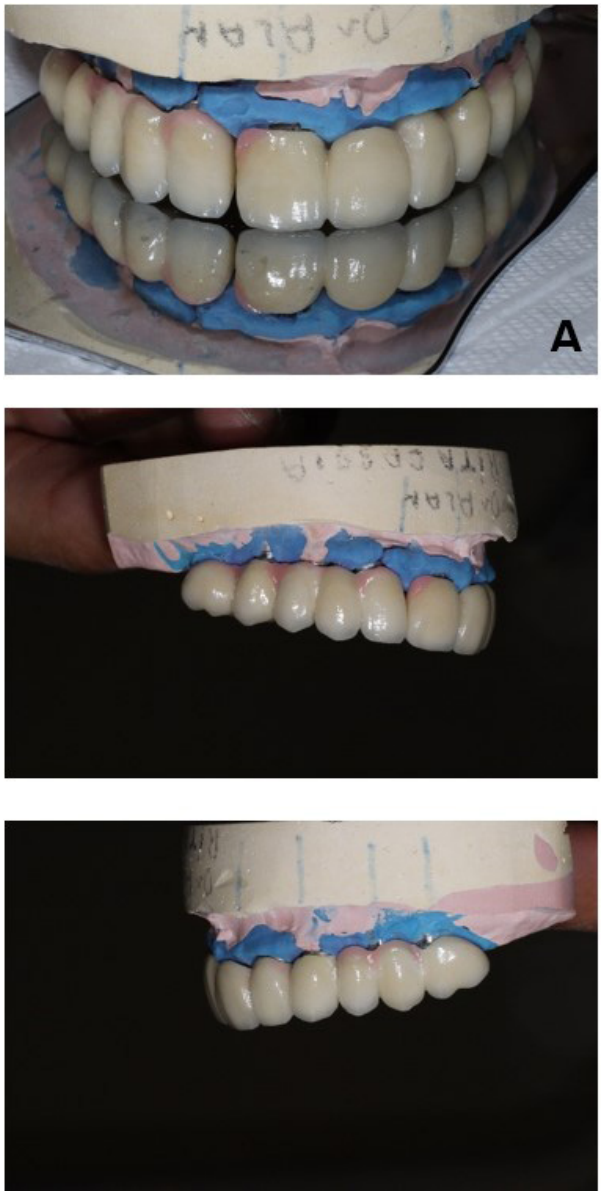


Figure 14 - (A, B, and C) - View of the metal-ceramic prostheses after the ceramic application and glazing process. Frontal and lateral views.

the low-speed handpiece associated with cooling. After these adjustments, the prostheses were sent to the laboratory technician for the ceramic sintering (glazing) procedure.

Prior to that, with the prosthesis installed in the patient's mouth, the patient was taken to a clinical setting at the UFG-School of Dentistry where a mirror was fixed on the wall. In this setting, the patient was shown the prostheses, and she expressed satisfaction with the results obtained so far.

Once this stage was completed, the cementation of the fixed prostheses on the implants was carried out using zinc phosphate cement (SS White - USA) (Figures 15A, B, C, D, E, and F). After cementation, guidance on control and maintenance was provided, and the patient expressed absolute satisfaction with the results. Controls and maintenance were performed after 1 week, 1 month, 3 months, and 6 months.

RESULTS

Smile evaluation proved to be a crucial step in the diagnosis, essential for planning the aesthetic dental treatment. The patient exhibited compromised aesthetics due to resin structure issues, including color alterations and wear, resulting in changes to the shape of the teeth. The access holes for the prosthesis screws, particularly in the anterior region, affected the buccal surfaces, further compromising aesthetics and complicating screw access.

To prioritize aesthetics in the anterior region, cemented prostheses were chosen. The treatment plan included the use of cemented crowns to ensure the continuity of the ceramic material, as these prostheses do not require access holes for retention screws, unlike screw-retained prostheses [11]. The selection of metal-ceramic crowns allowed for the combination of the aesthetics provided by porcelain with the strength and precision of metal, resulting in an excellent alternative for extensive oral rehabilitations when properly designed [12].

Additionally, it was planned for the crown margin to be located supragingivally. This positioning avoided excess cement in the peri-implant sulcus, thus preventing the compromise of tissue health in this region due to plaque accumulation. As a general result, it was possible to achieve prostheses that were aesthetically satisfactory and promoted periodontal health [8].

DISCUSSION

In recent decades, advancements in scientific understanding have vastly expanded the scope of oral rehabilitation with dental implants [13]. Simplified surgical techniques, innovations in implant design, and surface treatments have significantly contributed to successful outcomes in both maxillary and mandibular rehabilitation [14]. The choice between screw-retained and cement-retained implant-supported prostheses typically depends on clinical circumstances and practitioner preference.

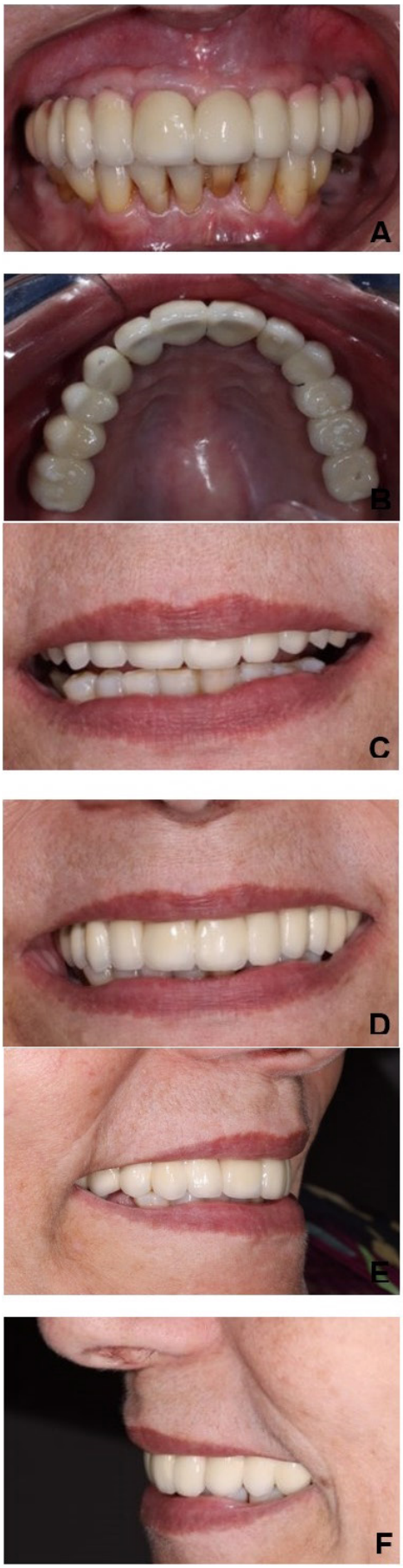


Figure 15 - (A, B, C, D, E, and F) - Frontal, occlusal, right lateral, and left lateral views of the metal-ceramic prostheses after installation on the intermediate abutments.

Extensive literature has analyzed the advantages and disadvantages of both retention methods, alongside technological advancements that have tailored these techniques to better meet clinical needs [15]. Cemented crowns and fixed partial prostheses have emerged as widely preferred restorations on implants [15].

Cement-retained prostheses offer several aesthetic and clinical advantages. They provide superior aesthetics by eliminating visible screw access channels, allowing for better ceramic layering and avoiding the need for aesthetic reconstructions with composite resin [16]. Additionally, their seamless occlusal surfaces promote stable and ideal occlusal contacts. In contrast, screw-retained restorations with large occlusal access holes often require additional occlusal restorative materials, which can wear down under functional stresses, potentially compromising occlusal stability [17]. Furthermore, achieving stable occlusal contacts with screw-retained restorations can be challenging due to the presence of restorative materials affecting occlusal forces, which may distribute forces laterally rather than axially [17].

Moreover, cemented restorations facilitate easier access to the posterior regions of the mouth, particularly beneficial for patients with restricted mandibular opening. Ensuring a passive fit in implant prostheses is critical to preventing prosthetic complications such as screw loosening, fracture, and bacterial accumulation leading to mucositis and peri-implantitis, which can endanger osseointegration [18].

One of the primary concerns associated with cement-retained prostheses is the risk of inadequate removal of excess cement from prosthetic restorations or peri-implant tissues, extensively studied in relation to peri-implant diseases [13], [14]. Excess cement may manifest typical signs of inflammation at the peri-implant gingival sulcus, leading to “pericementitis” and potentially progressing to peri-implantitis, causing significant loss of peri-implant soft and hard tissues [9].

The choice of cement type in cement-retained restorations has also been extensively researched, considering factors such as ease of excess cement removal and overall biocompatibility, which significantly influence clinical outcomes [11,12]. Factors such as implant pillar shoulder depth and prosthetic finishing line location further complicate complete cement

removal, affecting inflammatory responses and plaque accumulation [18].

Thus, while minimizing cement quantity during cementation procedures is crucial, using an adequate amount is equally important to maintain prosthetic retention. Balancing these factors is essential for achieving optimal outcomes in implant prosthodontics [19].

In addition to evaluating the type of final connection used in rehabilitation, careful consideration of the type of prosthesis is essential, which can include removable partial dentures, fixed partial dentures, and implant-supported prostheses [20]. Selim asserts that fixed prostheses demonstrate superior outcomes in the mandible in terms of stability, chewing function, aesthetics, and speech, whereas overdentures excel in these aspects when used in the maxilla [21]. However, overdentures are deemed more hygienic compared to fixed prostheses, as the fixed ones require professional dental cleaning, especially challenging with an increasing number of implants [21].

Implant-supported prostheses offer superior retention and consequently enhance bite force. However, overdentures are indicated when fixed implant-supported prostheses are impractical due to anatomical constraints or aesthetic and speech-related issues resulting from inadequate lip support [22].

When rehabilitating edentulous patients, anatomical variations and systemic diseases must be carefully considered before recommending a fixed implant-supported prosthesis, as the likelihood of prosthetic complications increases with the number of implants [23]. Moreover, many issues reported by conventional complete denture wearers can be addressed with an overdenture, improving maximum occlusal force and centric occlusion reproduction, as well as enhancing chewing capacity [24]. Therefore, each case should be individually assessed to optimize rehabilitation planning.

CONCLUSION

In conclusion, it was observed that the choice of cemented implant-supported prostheses represents a highly effective approach in the treatment of edentulism, providing not only clinical benefits such as increased retention and enhanced esthetic prospects but also positively impacting the quality of life for patients. The integration of diverse clinical skills and collaboration among professionals, especially dentists and laboratory technicians, play a crucial role in achieving satisfactory outcomes.

Acknowledgements

We express our sincere appreciation to Neodent, a leading provider of dental implant solutions for their generous provision of the diverse range of prosthetic components essential for the successful achievement of our project.

Author's Contributions

ASG: Methodology; Project Administration; Supervision; Writing – Original Draft Preparation. YMM: Conceptualization; Writing – Original Draft Preparation, Writing – Review & Editing. RVMM: Writing – Original Draft Preparation; Writing – Review & Editing. BLA: Writing – Original Draft Preparation; Writing – Review & Editing.

Conflict of Interest

The authors have no conflicts of interest to declare.

Funding

The present research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Regulatory Statement

The present case report did not require approval from the Ethics Committee, but the patient agreed to the proposed treatment and to the use of her case for articles by signing the informed consent form.

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Adérico Santana Guilherme
(Corresponding address)
Universidade Federal de Goiás, Faculdade de Odontologia, Departamento de Prevenção e Reabilitação Oral. Goiânia, GO, Brazil.
Email: adericguilherme21@hotmail.com

Date submitted: 2024 Mar 06
Accept submission: 2024 July 02