

Subject: [BDS] Editor Decision

Dear Tatiana Pereira, Ana Paula de Almeida Gomes, Bruna Oliveira Campos, Diogo Cabecinha Viegas, Alexandre Luiz Souto Borges, Renata Marques de Melo Marinho, Guilherme de Siqueira Ferreira Anzaloni Saavedra:

Your submission Developing Solutions for Complex Oral Rehabilitations: The Potential of Subtractive Manufacturing to Brazilian Dental Science, has been revised and according to reviewers' comments, there are questions to be addressed and/or points to be clarified/corrected.

Please answer the reviewers considerations point-by-point in a separate document and also please make all the corrections in the text highlighted in yellow.

Deadline: 30 days

Thank you for considering Brazilian Dental Science for publishing your research. We are looking forward the revised version of you manuscript.

Sincerely,

Comments to the Author

***Introduction**

1-While the introduction clearly describes the evolution and advantages of CAD/CAM technology for complete denture fabrication, it presents the digital workflow in a predominantly positive manner. To provide a more balanced and critical background, the authors are encouraged to include a brief discussion of the current limitations and challenges associated with digital complete dentures.

-Aspects such as the learning curve for clinicians and technicians, esthetic and phonetic adjustments, as well as the still limited long-term clinical evidence,

should be addressed. In addition, differences between additive and subtractive manufacturing techniques and their respective drawbacks could be acknowledged.

3-The main protocols differences between the conventional and digital workflows for complete denture fabrication. While both approaches are mentioned, the manuscript does not clearly outline how clinical and laboratory procedures differ between these methods.

***Case Report**

In the case report section, additional clinical details are required to ensure clarity, transparency, and reproducibility of the proposed digital workflow. The authors are encouraged to provide more comprehensive information regarding the following aspects:

1-A detailed description of the materials used, including commercial brand names, material types, and manufacturers, particularly for impression procedures and record materials.

2-A description of the patient's previous prosthetic condition, including whether complete dentures were worn in the maxillary and/or mandibular arches, the duration of use, and their clinical condition.

3- Information on the diagnostic examinations performed prior to treatment, such as panoramic radiographs or other imaging, when applicable.

4- A clinical description of the residual alveolar ridge, including its morphology, degree of resorption, and any relevant anatomical considerations.

5-Clarification on whether post-insertion adjustments were required and how the follow-up was conducted, including the duration and frequency of recall appointments.

6-the manuscript would benefit from the inclusion of additional clinical and laboratory images illustrating the case, while fully protecting the patient's identity, particularly considering that the main objective of the article is to demonstrate the importance and clinical applicability of the digital complete denture workflow.

***Discussion**

The Discussion section would benefit from a more coherent and critical analysis of the available literature rather than a predominantly descriptive presentation of isolated findings. Currently, the text lacks fluency and a clear narrative that integrates the presented case with broader evidence regarding digital complete denture workflows.

- The authors are encouraged to critically compare digital and conventional workflows, discussing not only reported advantages but also their limitations.

-In the case report, the authors describe the use of a conventional impression followed by digitization with a laboratory (desktop) scanner. However, in the Discussion section, several considerations are made regarding intraoral scanners. This discrepancy may cause confusion for the reader. The authors should clearly distinguish between these two methods of data acquisition and specify their respective limitations and clinical implications.

-The authors should also discuss whether the digital workflow is universally applicable or if its indication is case-dependent. Patient-related factors such as ridge morphology, degree of resorption, neuromuscular control, and need for esthetic or phonetic adjustments may influence the suitability of a fully digital approach and should be acknowledged.

-Previously published case reports on digital complete dentures have acknowledged limitations related to data acquisition accuracy and CAD design settings, as well as the need for post-manufacturing adjustments to achieve proper occlusion and comfort. In the present manuscript, however, these aspects are not discussed.

-The Discussion section does not address what has been reported in the literature regarding the mechanical performance of materials used for digitally fabricated complete dentures.

Reviewer F:

Comments

Comments to the Author

Although the manuscript is presented as a clinical report, the title and parts of the narrative suggest the development of a novel solution. However, the content primarily describes the clinical application of an established digital workflow, rather than the development of a new technique or concept.

Comments:

1. The current title does not accurately reflect the content of the manuscript. The use of the term “developing solutions” is misleading, as the work focuses on clinical application rather than innovation. A revised title emphasizing clinical decision-making, workflow strategy, or application of subtractive manufacturing is recommended.
2. The abstract summarizes the clinical sequence but does not highlight what differentiates this case from routine digital complete denture workflows. The rationale for selecting subtractive manufacturing is not explicitly stated. The abstract would benefit from briefly emphasizing the clinical reasoning behind the chosen manufacturing approach.
3. Subtractive manufacturing is repeatedly mentioned but not sufficiently defended as a clinical strategy. For the title and conclusions to be meaningful, the authors should explicitly clarify: -why subtractive manufacturing was selected over alternative approaches (e.g., additive manufacturing); -what specific clinical, mechanical, or workflow-related advantages justified this choice; -in which clinical scenarios this strategy may be preferable.
4. The case is described as a complex oral rehabilitation; however, no specific clinical characteristics are provided to support this classification. The authors should clarify whether complexity was related to: loss of vertical dimension of

occlusion; maxillomandibular discrepancies; anatomical, functional, or esthetic limitations; -previous prosthetic failures or adaptive difficulties. Without such details, the case appears closer to a conventional complete denture rehabilitation performed using a digital workflow.

5. While the cited references provide relevant background, incorporating more recent studies would strengthen the manuscript and better reflect the current state of digital complete denture workflows.

Case description:

- The chief complaint is reported; however, the patient history lacks sufficient depth to justify the classification of the case as complex. Additional clinical details would strengthen the rationale for the chosen approach.
- The digital workflow is described, but the narrative focuses primarily on what was done, rather than: why specific decisions were made; which alternatives were considered; how these decisions impacted predictability, treatment time, or the need for adjustments.
- The term “monolithic disc” is introduced without adequate explanation. The authors should clarify that this refers to a disc integrating both tooth and gingival components in a single block, and discuss the clinical and laboratory implications of this design.
- While the manuscript states that no initial adjustments were required, it later reports adjustments during follow-up visits. Greater clarity is needed regarding: the type and extent of adjustments; their clinical relevance; how this compares to conventional workflows.

Discussion:

The discussion emphasizes general advantages of digital workflows but lacks analysis of subtractive manufacturing limitations, such as: material waste; geometric constraints; cost; equipment dependency.

Several advantages discussed apply broadly to CAD/CAM dentistry rather than specifically to subtractive manufacturing. The discussion would benefit from clearly separating: benefits of digital workflows in general; advantages unique to milling-based fabrication; inherent limitations of the subtractive approach.

Figures:

The educational and scientific value of the manuscript would be enhanced by including: screenshots of the digital design stages; schematic representations of the workflow; images that demonstrate how clinical information from the try-in was translated into the digital design. An effective clinical report should not merely demonstrate a successful outcome, but also educate the reader by clearly documenting the steps required to replicate the workflow.

This manuscript presents a well-executed clinical workflow with clear relevance to digital complete denture fabrication. However, it could benefit from conceptual realignment by placing greater emphasis on the clinical rationale behind using subtractive manufacturing and providing clearer justification of case complexity. Refining the title, adding a more in-depth critical discussion, and improving visual documentation would significantly strengthen the manuscript's scientific and clinical impact.