

## Revision Cover Letter

**Answers to reviewers - Ref. No. 22250, Invitation ID No. 00739736:**

**Title:** Concepts and challenges of alveolar ridge preservation

**World Journal of Stomatology**

Dear Editor-in-chief,

Please find enclosed the revised manuscript entitled “**Concepts and challenges of alveolar ridge preservation**” that we would like to be considered for publication in World Journal of Stomatology. Please find also a letter explaining, point-by-point, the changes made in response to the critiques/suggestions that we received.

We sincerely thank the Reviewer for their thorough review of our manuscript and for the excellent suggestions that we received. We have made a concerted effort to adequately respond to each suggestion received from the Reviewer. We firmly believe that the Reviewer’s comments and suggestions have significantly improved this manuscript. We do hope that you and the Reviewer find this manuscript acceptable for publication in World Journal of Stomatology.

### **Comments from Reviewer 1 (code 02446101):**

In all, you have put great efforts in reviewing and discussing the current methods of alveolar ridge preservation to better delineate clinical decision before tooth extraction and titanium implants installation. After reading this review, I have a more comprehensive understanding of the concepts and challenges of alveolar ridge preservation. In my opinion, this article is of great benefit to the following researchers. However, there are some spelling errors. For example, the word “rehabilitatione” in line 13 page 4 should be spelled as “rehabilitation”.

**Answer:** Thank you for review our manuscript. The manuscript was revised by an expertise in English language, following the suggestions. The grammar errors

were corrected appropriately. See changes in blue.

**Comments from Reviewer 2 (code 02908557):**

I caution the authors to pay close attention to their writing. I can see several authors have co-authored this manuscript but none seemed to pay attention to the abstract that states: "Therefore, alveolar ridge preservation has become a challenge on contemporary clinical dentistry. The employment of biomaterials, as a therapeutic alternative to preserve bone density, ..."

Note 1: ridge preservation is not a challenge. It is a therapeutic approach to contain ridge resorption (ridge resorption is a challenge)

Answer: Thank you for review our manuscript. The information suggested was added in the *Abstract* section. See changes in blue.

Note 2: Ridge preservation does not have much to do with bone density. We do not have data showing that the density of the remaining bone is compromised. It is referring to preservation of ridge volume, or stated differently, ridge dimensional stability.

Answer: The comment was really relevant and this information was added in the *Abstract* and *Core tip* section. See changes in blue.

Again in the abstract is stated that: "Either autogenous bone as allogenic..." That implies that autogenous bone is allogenic. Please pay attention to detail.

Answer: Sorry for our inattention. This information was revised in the *Abstract* section. See changes in blue.

This abstract feels like it was written from one person and not proofread by anyone else. If you have multiple authors, please justify so.

Answer: We understand your concern and have done our best to revise the mistakes. The authors equally contributed to this paper with conception and

design of the study, literature review and analysis, drafting and critical revision and editing, and final approval of the final version.

Intro: " The best results for grafting are reported in reference to autogenous bone, for its osteogenic capacity, considering that it does not trigger a specific immune response [6]. " This is wrong. The reference is inappropriate and if the authors look at Araujo and Lindhe they will find that autogenous bone does not contribute to ridge preservation. Please remove.

Answer: The references cited by reviewer have been corrected in the text. See changes in blue.

Inorganic bone: For reference 32, this is well worded but it should be added that this difference did not seem to be clinically significant (note that the difference is only 0.13mm between the groups).

Answer: We thank the Reviewer for having suggested this important point. This information was added in the 1<sup>st</sup> paragraph at *Inorganic bovine bone graft* section. See changes in blue.

Alloplastic materials: The reference to the bioactive glass is missing the most recent citation on boils: JOI 2015 Apr;41(2):178-83. Please note how in this study two biomaterials that lead to similar ridge preservation have differences in how fast they can give good quality bone in the socket. This should be a future goal for ridge preservation studies: how fast we achieve new bone ready for implant placement in the socket.

Answer: We thank the Reviewer for having raised this important point. This information and reference were added in the 4<sup>th</sup> paragraph at *Alloplastic materials* section. See changes in blue.

38- Mahesh L, Venkataraman N, Shukla S, Prasad H, Kotsakis GA Alveolar Ridge Preservation With the Socket-Plug Technique Utilizing an Alloplastic Putty Bone Substitute or a Particulate Xenograft: A Histological Pilot Study JOI 2015 Apr;41(2):178-83

Mucosal closure: The authors should mention the cytoplast technique by Hoffman that leads to good bone without mucosal closure and also the socket-plug technique that leads to good ridge preservation without mucosal closure but only in type I defects.

Answer: We thank the Reviewer for having suggested this important point. This information and reference were added in the 5<sup>th</sup> paragraph at *Mucosal closure* section. See changes in blue.

45- Hoffman O, Bartee BK, Beaumont C, Kasaj A, Deli G, Zafiropoulos GG Alveolar bone preservation in extraction sockets using non-resorbable dPTFE membranes: A retrospective non-randomized study. J Periodontol. 2008;79:1355-1369

In conclusion, this study is now close to being acceptable for publication, but in order to be there it needs: 1) attention to detail, 2) inclusion of additional studies as noted above to give a more complete perspective of different treatment alternatives.

Answer: First we appreciate your detailed and kind considerations at our manuscript. We understand your concern about the attention to detail and inclusion of additional studies. We have done our best to revise the mistakes and add the information suggested.

**Comments from Reviewer 3 (code 00504290):**

(1) English writing errors should be checked and corrected.

Answer: Thank you for review our manuscript. The manuscript was revised by an expertise in English language, following the suggestions. The grammar errors were corrected appropriately. See changes in blue.

(2) More studies about the time of implantation after bone augmentation should

be discussed and referenced.

Answer: We would like to thank the Reviewer for having raised this important point. This information was added in the 1<sup>st</sup> and 2<sup>nd</sup> paragraph of the *Time of implantation after alveolar ridge preservation* section. See changes in blue.

The references added in the text are listed below:

38- Mahesh L, Venkataraman N, Shukla S, Prasad H, Kotsakis GA Alveolar Ridge Preservation With the Socket-Plug Technique Utilizing an Alloplastic Putty Bone Substitute or a Particulate Xenograft: A Histological Pilot Study *JOI* 2015 Apr;41(2):178-83.

47- Torres J, Tamimi F, Alkhraisat MH, Manchón A, Linares R, Prados-Frutos JC, Hernández G, López Cabarcos E. Platelet-rich plasma may prevent titanium-mesh exposure in alveolar ridge augmentation with anorganic bovine bone. *J Clin Periodontol.* 2010 Oct;37(10):943-51. doi: 10.1111/j.1600-051X.2010.01615.x.

48- Zitzmann NU, Schärer P, Marinello CP, Schüpbach P, Berglundh T. Alveolar Ridge Augmentation with Bio-Oss: A Histologic Study in Humans *Int J Periodontics Restorative Dent.* 2001 Jun;21(3):288-95.

49- Carmagnola D, Adriaens P, Berglundh T, Healing of human extraction sockets filled with Bio-Oss *Chn. Oral Impl. Res.* 14, 1003; 137-145

50- Sterio TW, Katancik JA, Blanchard SB, Xenoudi P, Mealey BL. A prospective, multicenter study of bovine pericardium membrane with cancellous particulate allograft for localized alveolar ridge augmentation. *Int J Periodontics Restorative Dent.* 2013 Jul-Aug;33(4):499-507. doi: 10.11607/prd.1704.

51- Kutkut A, Andreana S, Kim HL, Monaco E Jr. Extraction socket preservation graft before implant placement with calcium sulfate hemihydrate and platelet-rich plasma: a clinical and histomorphometric study in humans. *J Periodontol.* 2012 Apr;83(4):401-9. doi: 10.1902/jop.2011.110237. Epub 2011 Aug 23.

52- Al-Sabbagh M<sup>1</sup>, Burt J, Barakat A, Kutkut A, El-Ghannam A. Alveolar ridge preservation using resorbable bioactive ceramic composite: a histological study. *J Int Acad Periodontol.* 2013 Jul;15(3):91-8.

(3) More studies about different membrane materials for bone augmentation can be discussed.

Answer: We would like to thank the Reviewer for having suggested this important point. This information was added in the 4-6<sup>th</sup> paragraphs of the

*Mucosal closure* section. See changes in blue.

The references added in the text are listed below:

45- Hoffman O, Bartee BK, Beaumont C, Kasaj A, Deli G, Zafiropoulos GG Alveolar bone preservation in extraction sockets using non-resorbable dPTFE membranes: A retrospective non-randomized study. J Periodontol. 2008;79:1355-1369

46- Khojasteh A1, Soheilifar S, Mohajerani H, Nowzari H. The effectiveness of barrier membranes on bone regeneration in localized bony defects: a systematic review. Int J Oral Maxillofac Implants. 2013 Jul-Aug;28(4):1076-89. doi: 10.11607/jomi.2925

(4) Some Figures or Tables can be organized to improve the clarity of manuscript presentation.

Answer: Although the reviewer suggested to insert some picture or table in this manuscript, the authors believe not be necessary a table or image because this manuscript is not a systematic review.

## Revision Cover Letter

**Answers to editor - Ref. No. 22250, Invitation ID No. 00739736:**

**Title:** Concepts and challenges of alveolar ridge preservation

**World Journal of Stomatology**

Dear Editor-in-chief,

We sincerely thank the review of our manuscript and for the excellent suggestions that we received. We have made a concerted effort to adequately write it. We do agree with all changes made. We do hope that this manuscript contributes for the World Journal of Stomatology.

Best regards

Etiene Andrade Munhoz

Corresponding author