

Paper: “Evaluation of Guided Bone Regeneration Using Xenograft/APRF Mixture in Atrophic Posterior Mandible (Clinical and Radiographic Study)”

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Corresponding Author: Ramy Richa

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Peer review:

Reviewer 1: Mehrasa Nikandish

Program of Pharmacy, University of Georgia, Georgia

Reviewer 2: Ali Rasheed Alhamammi

Ministry of Health, Iraq

Reviewer 3: Yehia El Mahalwi

Alexandria University, Egypt

Reviewer G:
Recommendation: Accept Submission

The TITLE is clear and it is adequate to the content of the article.

Yes ,it covered the required properties

The ABSTRACT clearly presents objects, methods, and results.

Yes

There are a few grammatical errors and spelling mistakes in this article.

Yes

The study METHODS are explained clearly.

Yes , but need little details

The body of the paper is clear and does not contain errors.

Yes

The CONCLUSION or summary is accurate and supported by the content.

Yes but need little details

The list of REFERENCES is comprehensive and appropriate.

Yes

Please rate the TITLE of this paper.

[Poor] 1-5 [Excellent]

5

Please rate the ABSTRACT of this paper.

[Poor] 1-5 [Excellent]

4

Please rate the LANGUAGE of this paper.

[Poor] **1-5** [Excellent]

4

Please rate the METHODS of this paper.

[Poor] **1-5** [Excellent]

4

Please rate the BODY of this paper.

[Poor] **1-5** [Excellent]

4

Please rate the CONCLUSION of this paper.

[Poor] **1-5** [Excellent]

4

Please rate the REFERENCES of this paper.

[Poor] **1-5** [Excellent]

4

Overall Recommendation!!!

Accepted, minor revision needed

Comments and Suggestions to the Author(s):

The manuscript should contain more details about the manufacturing details about the titanium reinforced membrane and some pictures about the process of fixation

Reviewer P:
Recommendation: Resubmit for Review

The TITLE is clear and it is adequate to the content of the article.

Revision required as " Clinical and Radiographic Evaluation of Guided Bone Regeneration using Xenograft/ A-PRF combination in Atrophic Posterior Mandible"

The ABSTRACT clearly presents objects, methods, and results.

Objective is missing in abstract. Abbreviations are used frequently without mentioning the complete terminology first with abbreviation in the parenthesis. e.g. GBR in first mention must be written as Guided Bone Regeneration (GBR). Likewise for other terminologies..

There are a few grammatical errors and spelling mistakes in this article.

Major rephrasing and grammatical corrections are required. few spelling mistakes need to be corrected

The study METHODS are explained clearly.

-Methods are written well in detail, are clear and understandable. However paraphrasing of the methods write up is required with correct way of mentioning terminologies with their abbreviations.
- Radiographic evaluation must be done by two investigators as it is the subjective assessment part of methodology and must be free of bias.

The body of the paper is clear and does not contain errors.

Introduction: is overall very weak. It contains lot of basic knowledge but addresses the research area very less. It does not mention the work done so far in the area of research, what are the gaps left and what new contribution is being added in the subject area by present research. Objectives of the study are not stated clearly. Rationale is fine.

Results: Instead of the word 'quantity' of bone, 'Volume/height and width' must be used.

Tables and Figures: Captions need major revisions. rephrasing of all the captions required e.g. "Comparison between the different studied period according to swelling" must be changed as "Comparison of swelling at three study time intervals". Rest of

the captions must also be revised by maintaining the context of tables/figures
Discussion: in-text references are incorporated in a wrong way, both as a part of sentence and as an in-text reference.

The CONCLUSION or summary is accurate and supported by the content.

Conclusion : it must first contain the study's results and then the supporting statements. so a more elaboration and re-ordering of statements is required

The list of REFERENCES is comprehensive and appropriate.

In-text and bibliographic references are aligned, however some references are more than 10 years old.

Please rate the TITLE of this paper.

[Poor] **1-5** [Excellent]

3

Please rate the ABSTRACT of this paper.

[Poor] **1-5** [Excellent]

3

Please rate the LANGUAGE of this paper.

[Poor] **1-5** [Excellent]

2

Please rate the METHODS of this paper.

[Poor] **1-5** [Excellent]

5

Please rate the BODY of this paper.

[Poor] **1-5** [Excellent]

2

Please rate the CONCLUSION of this paper.

[Poor] **1-5** [Excellent]

2

Please rate the REFERENCES of this paper.

[Poor] **1-5** [Excellent]

4

Overall Recommendation!!!

Return for major revision and resubmission

Comments and Suggestions to the Author(s):

Follow comments

Reviewer S:

Recommendation: Revisions Required

The TITLE is clear and it is adequate to the content of the article.

title is clear and comprehensible

The ABSTRACT clearly presents objects, methods, and results.

a structured abstract and informative one is presented

There are a few grammatical errors and spelling mistakes in this article.

The study METHODS are explained clearly.

the methodology is clear

The body of the paper is clear and does not contain errors.

according to the journal submission guidelines, the body of the manuscript is sound.

The CONCLUSION or summary is accurate and supported by the content.

the conclusion is stated but needs refinement

The list of REFERENCES is comprehensive and appropriate.

the reference bibliography is provided

Please rate the TITLE of this paper.

[Poor] 1-5 [Excellent]

4

Please rate the ABSTRACT of this paper.

[Poor] 1-5 [Excellent]

4

Please rate the LANGUAGE of this paper.

[Poor] 1-5 [Excellent]

4

Please rate the METHODS of this paper.

[Poor] 1-5 [Excellent]

4

Please rate the BODY of this paper.

[Poor] **1-5** [Excellent]

4

Please rate the CONCLUSION of this paper.

[Poor] **1-5** [Excellent]

2

Please rate the REFERENCES of this paper.

[Poor] **1-5** [Excellent]

4

Overall Recommendation!!!

Accepted, minor revision needed

Comments and Suggestions to the Author(s):

- A better clear statement of the study objective is needed to be added at the end of the introduction segment
- Add study limitation in the discussion
- Rephrase the conclusion to better outline the importance of the study.

Reviewer T:

Recommendation: Revisions Required

The TITLE is clear and it is adequate to the content of the article.

The title of the research article, "Evaluation of guided bone regeneration using xenograft/A-PRF mixture in atrophic posterior mandible: A Clinical and Radiographic Study," is deemed clear and aptly representative of the article's content.

It effectively communicates the primary focus of the investigation, centered around the assessment of guided bone regeneration within the atrophic posterior mandible utilizing a combination of xenograft and advanced platelet-rich fibrin (A-PRF). The title succinctly indicates the clinical and radiographic aspects incorporated into the study. Given its clarity and alignment with the research content, I would assign a rating of 4 out of 5. While it adeptly encapsulates the central themes, there exists a potential for slight refinement to enhance precision further.

The ABSTRACT clearly presents objects, methods, and results.

The abstract succinctly addresses the challenges of posterior mandible rehabilitation, employing guided bone regeneration (GBR) techniques. Fifteen patients underwent treatment using a xenograft bovine bone/PRF mixture with a titanium-reinforced membrane. Results indicate favorable primary wound healing, significant bone quantity increase (mean 5.78 ± 0.81), and heightened primary implant stability ($p=0.037$) at 6 months post-insertion. The conclusion suggests the potential of the PRF/xenograft mixture with a titanium-reinforced membrane for 3D ridge reconstruction. The abstract is clear and effectively summarizes the study's objectives, methods, and outcomes.

There are a few grammatical errors and spelling mistakes in this article.

The article demonstrates a comprehensive exploration of guided bone regeneration (GBR) using a xenograft/A-PRF mixture in atrophic posterior mandibles. The methods, results, and conclusions are clearly presented. However, there are several grammatical errors and spelling mistakes throughout the article. For instance, there are inconsistencies in punctuation, sentence structure, and tense usage. Additionally, some sentences could be more concise for better clarity. It is advisable to thoroughly proofread and edit the article to enhance its overall quality. I would rate the article a 3 out of 5. While the content is informative and well-structured, the presence of grammatical errors and spelling mistakes detracts from the overall quality. Addressing these issues through careful proofreading and editing would significantly improve the article's readability and professionalism.

The study METHODS are explained clearly.

The study provides a clear and detailed explanation of its methods, covering participant selection, guided bone regeneration surgery, and the use of specific materials. Procedures, from anesthesia to postoperative care, are outlined. Preoperative cone beam CT assessment is highlighted. The article discusses methods for evaluating clinical and radiographic outcomes, including measurements of bone quantity, implant stability, and soft tissue healing. Overall, the presentation is organized and comprehensive. A rating of 4 out of 5 is given, acknowledging clarity but allowing for minor language and structural enhancements.

The body of the paper is clear and does not contain errors.

The paper's body is generally clear and well-organized, detailing the study's objectives, methods, results, and conclusions. Despite informative content, there are grammatical errors and typos, such as "PFR" instead of "PRF" in the Results section.

Some sentences, like "that was agreed with" in the Discussion, could be refined. Overall, the paper requires minor language improvements for smoother readability, earning a 3 out of 5 for clarity.

The CONCLUSION or summary is accurate and supported by the content.

The conclusion accurately summarizes the study's outcomes, affirming the promise of using a PRF/xenograft mixture with a titanium-reinforced membrane for guided bone regeneration in atrophic posterior mandibles. It underscores the positive impact on soft tissue healing, dehiscence prevention, and substantial bone quantity increase. The connection between elevated implant stability quotient (ISQ) values and successful 3D bone augmentation is logically established. Overall, the conclusion aligns seamlessly with the research objectives and results, offering a concise and well-supported summary of the study's findings. I would rate the conclusion's accuracy and support as 5 out of 5.

The list of REFERENCES is comprehensive and appropriate.

The list of references provided is comprehensive and appropriate for the topic of guided bone regeneration in dental implantology. It encompasses a range of studies and reviews from reputable journals, covering various aspects such as platelet-rich fibrin, bone grafts, membrane techniques, and clinical outcomes. The references include well-known authors in the field and studies that contribute to the understanding of the subject. The use of a variety of sources adds depth to the literature review and supports the credibility of the information presented in the article. Overall, the references appear to be carefully selected to provide a solid foundation for the research.

Please rate the TITLE of this paper.

[Poor] 1-5 [Excellent]

4

Please rate the ABSTRACT of this paper.

[Poor] 1-5 [Excellent]

4

Please rate the LANGUAGE of this paper.

[Poor] 1-5 [Excellent]

3

Please rate the METHODS of this paper.

[Poor] 1-5 [Excellent]

4

Please rate the BODY of this paper.

[Poor] 1-5 [Excellent]

3

Please rate the CONCLUSION of this paper.

[Poor] 1-5 [Excellent]

5

Please rate the REFERENCES of this paper.

[Poor] 1-5 [Excellent]

5

Overall Recommendation!!!

Accepted, minor revision needed

Comments and Suggestions to the Author(s):

The article on guided bone regeneration in dental implantology offers a comprehensive exploration of surgical techniques and materials. While generally well-structured, improvements in transitions and visual aids could enhance clarity. The language is mostly clear, with occasional opportunities for simplification. Consistent citation formatting is recommended. Including future research implications, emphasizing clinical relevance, and addressing limitations would enrich the discussion. The abstract might benefit from more specific result highlights. Engaging more actively with existing literature and a final proofread for errors would

refine the scholarly quality. Overall, the research provides valuable insights, and these suggestions aim to enhance its accessibility and impact.
