Dear reviewers and editors,

We are submitting our revised manuscript entitled "Efficacy of bone grafts in jaw cystic lesions: A systematic review". We have carefully taken all the comments into account and made alterations. The responses are as follows,

To reviewer #1:

Comments: This article is including only four articles so it is not possible to extract objective outcomes. it is kindly of suggested to expand the inclusion criteria to include a minimum of eight articles to gain more statistical power.

Response:

Thank you for your valuable suggestion. We have altered the inclusion criteria and included 10 articles in the revised manuscript. The time range was expanded to recent 10 years and the minimum number of participates in each treatment group was reduced to 5. Besides, in order to extract a more objective conclusion, articles without a uniform follow-up time were excluded. As a result, one of the former included articles was excluded now [1], and other 7 new articles were included [2-8]. We think the article is more convincing now.

To reviewer #2:

Comments: The efficacy of and indications for bone grafts in jaw cystic lesions In the title reference to "indications" can be removed.

Response:

Thanks for your reasonable advice and we made thorough discussion about it. We have removed the "and indications for" from our title and made some alterations in the part of "Factors associated with effective bone formation and treatment considerations for jaw cystic lesions" in the discussion section.

Our original idea was to summarize the indications for bone grafts in this part from the articles we included. Apparently, we failed to summarize clear indications. Since the focus of this article was the efficacy of bone graft, we decided to emphasize the factors that affect bone regeneration and summarize the considerations when choosing treatment plan for jaw cystic lesions. The relative statements were altered in discussion section.

To Science editor:

Comments: This review conducted a systematic study on the efficacy of bone grafting, and analyzed the influencing factors and indications of bone grafting. It is recommended to expand the inclusion criteria of articles. Please indicate the citation number of the references in the Table. This manuscript is more suitable for the world Journal of Orthopedics.

Response:

Thanks for your advice. We have expanded the inclusion criteria of articles and included 10

articles in the revised manuscript. We expanded the time range and reduced the minimum number of participates in each treatment group. Besides, in order to extract a more objective conclusion, articles without a uniform follow-up time were excluded. As a result, one of the former included articles was excluded now [1], and other 7 new articles were included [2-8].

The data of 10 included articles was collected and summarized in Table 1, and the citation number was indicated in the first column.

To Company editor-in-chief:

Comments: I have reviewed the Peer-Review Report, full text of the manuscript, and the relevant ethics documents, all of which have met the basic publishing requirements of the World Journal of Clinical Cases, and the manuscript is conditionally accepted. I have sent the manuscript to the author(s) for its revision according to the Peer-Review Report, Editorial Office's comments and the Criteria for Manuscript Revision by Authors.

Please provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor. Authors are required to provide standard three-line tables, that is, only the top line, bottom line, and column line are displayed, while other table lines are hidden. The contents of each cell in the table should conform to the editing specifications, and the lines of each row or column of the table should be aligned. Do not use carriage returns or spaces to replace lines or vertical lines and do not segment cell content.

Response:

Thank you for your approval of the manuscript.

We have uploaded the original file of the PowerPoint of Figure 1.

To better illustrate and reveal the data we extracted from the article, the former two tables were combined to current Table 1. Now Table 1 is a standard three-line table and meets the requirements of tables.

Thanks for your reading. If you have any questions, please do not hesitate to contact me.

Sincerely, Jin Wang

2021.12.18

References:

1 Sacher C, Holzinger D, Grogger P, Wagner F, Sperl G and Seemann R. Calculation of postoperative bone healing of cystic lesions of the jaw-a retrospective study. *Clin Oral Investig* 2019; 23: 3951-3957 [PMID: 30693400 DOI 10.1007/s00784-019-02826-y]

- 2 Demir E and Gunhan O. Treatment Results of Dentigerous Cysts Managed by Marsupialisation, Enucleation or Enucleation with Platelet Rich Plasma-a Retrospective Study. *Meandros Medical and Dental Journal* 2021; 22: 116-124 [PMID: WOS:000648668200001 DOI 10.4274/meandros.galenos.2021.86094]
- 3 Kattimani V, Lingamaneni KP, Chakravarthi PS, Kumar TS and Siddharthan A. Eggshell-Derived Hydroxyapatite: A New Era in Bone Regeneration. *J Craniofac Surg* 2016; 27: 112-7 [PMID: 26674907 DOI 10.1097/SCS.00000000000002288]
- 4 Rubio ED and Mombru CM. Spontaneous Bone Healing after Cysts Enucleation without Bone Grafting Materials: A Randomized Clinical Study. *Craniomaxillofac Trauma Reconstr* 2015; 8: 14-22 [PMID: 25709749 PMCID: PMC4329039 DOI 10.1055/s-0034-1384738]
- 5 Chacko R, Kumar S, Paul A and Arvind. Spontaneous Bone Regeneration After Enucleation of Large Jaw Cysts: A Digital Radiographic Analysis of 44 Consecutive Cases. *J Clin Diagn Res* 2015; 9: ZC84-9 [PMID: 26501020 PMCID: PMC4606349 DOI 10.7860/JCDR/2015/13394.6524]
- 6 Kattimani VS, Chakravarthi SP, Neelima Devi KN, Sridhar MS and Prasad LK. Comparative evaluation of bovine derived hydroxyapatite and synthetic hydroxyapatite graft in bone regeneration of human maxillary cystic defects: a clinico-radiological study. *Indian J Dent Res* 2014; 25: 594-601 [PMID: 25511058 DOI 10.4103/0970-9290.147100]
- 7 Kattimani VS, Bajantai NV, Sriram SK, Sriram RR, Rao VK and Desai PD. Observer strategy and radiographic classification of healing after grafting of cystic defects in maxilla: a radiological appraisal. *The journal of contemporary dental practice* 2013; 14: 227-32 [PMID: 23811650 DOI 10.5005/jp-journals-10024-1304]
- 8 Discacciati ED, de Faria VM, Garcia NG, Sakai VT, Pereira AA and Hanemann JA. Idiopathic bone cavity: case series involving children and adolescents. *J Investig Clin Dent* 2012; 3: 103-8 [PMID: 22522949 DOI 10.1111/j.2041-1626.2011.0087.x]