

Peer Review File

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Reviewer comments

The authors performed a Systematic Review on the efficacy of Patient-Fitted Total Joint Prostheses and Orthognathic Surgery to Reconstruct Patients with Congenital Craniofacial Deformities and Temporomandibular Joint Malformation.

The subject is interesting, current and within the scope of the journal.

However, I understand that some points need to be overcome before its publication in this scientific journal, especially aimed at carrying out the systematic review.

Despite being a subject that, according to the authors, there are few published works; the search strategy used - using very specific descriptors, without alternative terms and without the use of MeSH terms, in addition to the selection of only one database, may have contributed to the authors finding few studies.

Other points for reflection are presented throughout the manuscript.

P3 L47: None of the keywords used are MeSH terms.

P3 L51-65: There is no citation of previous published works in this paragraph.

P4 L85: Some doubts regarding the methodology used in the study:

- Has the systematic review been registered in any database?
- On what date was the search carried out?
- Were no MeSH terms used in the search?
- Was there a limitation of publication date or language in the search?

P5 L95: Why did the author search only in PubMed?

P5 L96: Where this two terms the only terms used? Which boolean operators?

P5 L98: Does the manuscript have one or two authors?

P7 L151: (16-18)

P7 L156: (16, 18, 19)

P8 L166: Usually, data extraction is presented in the form of a table. This favors visualization and comparison between studies. I suggest adopting the presentation in table format.

P11 L236: Indeed the literature may be sparse, but it is possible that more studies would have been found if MeSH descriptors, different search strategies and different databases were used.

P11 L236: 4 studies were included.

P12 L257: Is the number of treated patients sufficient to reach this conclusion? Was statistical

analysis of the data performed?

1. Date of search and time frames have been added.
2. The search strategy was expanded to include the following sources: Pub Med, Cochran, Scopus, Web of Science, Ovid, and manual searches.
3. MeSH terms were used to address the subject matter. The MeSH filters and

Boolean operatives have been added.

4. It is clarified that only English language papers were included for analysis.

5. Data extraction has been described including the basic elements and key indicators.

6. Selection process: Originally there were two reviewers, but a third reviewer (CH) was added and included as an author for his significant contribution in the preparation of this paper for resubmission. The second reviewer was inadvertently left off the previous submission. On the title page, the contributions of each of the three authors are identified. The three reviewers independently screened and reviewed the literature and provided the data extraction independently. Any conflicts were discussed and resolved with a unanimous decision.

7. Quality assessment has been added to determine risk of bias. The results are in Table 2.

In-house review comments

Comment 1: Methodology

(1) The search strategy is not systematic and comprehensive enough. Please also report the date of search and timeframe (specified to date, month and year).

(2) Databases: Only searched PubMed? As a systematic review, did the authors consider additional databases (e.g., Cochrane, EMBASE, Web of Science) as well as supplemental searches (e.g., manual searches, references, gray literature)? Include any filters and restrictions used.

(3) Search terms: We suggest the authors add more synonyms and MeSH terms. Importantly, please provide a detailed search strategy so that the reader can repeat this study.

(4) Eligibility criteria: Are there any language restrictions?

(5) Data Extraction: Please specify the extracted information (data extraction form), including basic elements (e.g., title, author, country, year) and key indicators. Please list and define all outcomes for which data were sought in the text.

(6) Selection process: How many authors are there? Both the "Author Contributions" and the "MATERIALS AND METHODS" show that there are two reviewers involved in this review. Please explain clearly and follow strictly the ICMJE requirements for authorship. In addition, did the two reviewers perform literature screening and data extraction independently? How to resolve differences?

(7) Last but not least, as a systematic review, "Quality Assessment" is essential. Please specify the methods used to assess the risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process.

Comment 2: Results

(1) Lines 113-118: The final included literature number seems not correct (11-2-4=5 instead of 4). Please re-check it. In addition, we suggest authors use a flow diagram to summarize these key information. For authors' reference, here is an example (see Figure 1): <https://jtd.amegroups.com/article/view/53967/html>

- (2) In Table 1, we suggest the authors add citations for each reference.
- (3) According to comment 1(7), please present the risk of bias evaluation results for each included study.

1. The number of articles has been corrected. Since initial submission, two additional articles were identified and added to this study for a total of 13 papers. Nine were eliminated for various reasons as outlined in Figure 1 and four studies were identified for inclusion. A flow diagram summarizes the key information (Figure 1).
2. In Table 1, citations have been added for each of the references.
3. Risk and bias results for each included study are presented in Table 2.

Comment 3: Others

- (1) Although it appears that two reviewers were involved in the review, there was only one author. We suggest the authors could explain it and explain attempts to assure accuracy and address potential bias (such as selection bias and information bias etc.). Most importantly, clearly tell readers how results should be interpreted with caution. This may go some way to reducing the reader's bias against systematic reviews by a single author.
- (2) Does a review protocol exist? Is the protocol available and where it can be accessed (e.g., a Web address); and if available, please provide registration information, including the registration number. If not, please also state it.
- (3) Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review.

1. Initially, there were two reviewers (LW and MK). MK was inadvertently left off the previous submission. In addition, a third author CH has been added for the significant work and his contribution to providing the additional searches and development of tables, Figure 1 as well as reviewing papers for inclusion and contributing to the text of the document.
2. Data retrieval form was specifically designed for this paper and there is no registration information or registration number.
3. Template data collection form. The data extracted is included in Table 1. Since three of four papers provided descriptive results and only one paper provides a statistical

analysis of the cases included, there is no analytic code.