

Peer Review File

Article information: <https://dx.doi.org/10.21037/joma-22-2>

Review Comments:

Reviewer A:

Trigeminal neuralgia in the elderly is not uncommon. The authors' review of the treatment modalities for this condition is necessary and of clinical value. I would also like to see how this review differs from similar summaries that have been done in the past, and how the reader can read and apply this knowledge more easily. Here are some suggestions.

Major Concerns

Comment 1:

As can be seen, the authors' literature search for this research question was relatively comprehensive, covering studies published between April 2005 and September 2021 on the use of RF and PRF for TN. I suggest that the authors mention in the abstract and introduction the new knowledge added to this review compared to similar reviews and that similar reviews need to be cited in the references for comparison. For example, the previous review focused on A, while we have added a review on B. The previous review has more information from A, while we have more information from B, which is more informative and updated, and so on.

Reply 1:

We have added the following statement to the abstract.

The previous review focused on the effectiveness and safety of TN treatment via different radiofrequency approaches, while we have added a review on comparison of radiofrequency thermocoagulation with other surgical procedures.

We have added the following statement to the introduction.

The previous review focused on the effectiveness and safety of TN treatment via different radiofrequency approaches, while there are few reports on trigeminal nerve block in compromised patients and comparison of nerve block and MVD.

This is very important to highlight the specific value of this review among many similar reviews.

And, I would also suggest that the authors add this in the title in addition to the abstract and introduction. For example: Treatment of trigeminal neuralgia in the elderly: a narrative review based on literature between 2005 and 2021. This is just for the authors' reference, and this example title is to highlight the informative nature of this review, covering 16 years of information in the literature. The authors could continue to refine and give more accurate, focused title.

Reply 1:

We changed the title to “Treatment of trigeminal neuralgia in older adults: a narrative review based on literature published between 2005 and 2021. “

Comment 2:

The purpose of the article is not clear enough.

In the last paragraph of the introduction, there are three research questions. However, in the discussion that follows, there is no direct answer to these three questions. Similarly, the conclusion in the abstract does not provide a one-to-one answer to these three questions. The discussion section of the article is divided into 4 areas, which do not correspond to the 3 research questions. I suggest that the authors either revise the research question or revise the way the subsequent body is written so that the title, abstract purpose, abstract conclusion, introduction purpose/research questions, and body structure, remain in harmony with the goal of consistency.

Reply 2:

We clarified the purpose and made it consistent with the title, abstract purpose, abstract conclusion, introduction purpose/research questions, and body structure.

Comment 3:

Many arguments lack support from the literature and need to ensure the provenance of ideas. There are more than a few places. For example, in the introduction, "The antiepileptic drug carbamazepine is the drug of choice for the treatment of TN. Oxcarbazepine, baclofen, and lamotrigine are used as second- and third-line pharmacotherapy."-relevant guidelines should be cited; "The duration of efficacy is 1-1.5 years for the infraorbital nerve block and 2-3 years for the mandibular nerve block"-lack of support in the literature.

Reply 3:

We have added the references.

This is only part of what I mentioned. The authors should check the entire text to ensure the provenance of ideas and data.

Comment 4:

Results:

If possible, I wonder if the authors could present a summary of the 32 studies included after the search by means of a table?

Reply 4:

We have added Figure 1-3.

Comment 5:

Discussion:

The 4 parts of the discussion are very core, so I suggest that the authors present the core ideas in a table or picture as well. This way the reader peers can see and know

very clearly the pros and cons of each treatment modality and the choices and actions in specific context situations based on this table or flow chart.

Reply 5:

We have added Figure 1-3 and flowchart.

Comment 6:

The authors' perspective is well integrated with the integration of the 32 included studies. This is good. However, what I would also like to know is whether the authors have thought critically about this literature? For example, the sample sizes of some studies may be inadequate, what aspects of some studies may be biased, so our recommendation is xxx. I would like to see the authors' consideration of the quality of these included studies (it does not have to be like a systematic review, but at least it needs to show that the authors have considered and then made their recommendation, not just picking up the findings of others directly).

Reply 6:

We added a fourth question to the Discussion.

This review has several limitations. First, since we only used the PubMed database, we did not include all target data. Second, we included a broad range of study designs, with weaker study designs increasing the risk of bias. Third, the sample sizes were not balanced between MVD and nerve block. Regarding the effectiveness of nerve block, the number of patients with and without guidance such as three-dimensional CT varied, which impeded proper evaluation. Finally, the long-term follow-up data regarding the treatment effect were inconsistent across studies. Future high-quality cross-sectional surveys using standard sampling methods and surgical treatment are warranted to elucidate the efficacy of RF, PRF, and other surgical procedures in TN treatment.]

Comment 7:

It is not clear to me why the authors are discussing the temperature setting of the RF separately. Because the authors' conclusion is that the combined use of PRF and RF is recommended, why do they specifically highlight only the temperature setting of RF separately?

Reply 7:

We added a fourth question to the introduction. "How does the efficiency and safety compare between different temperature settings in nerve blocks?"

Minor Concerns

Comment 8:

Title:

The authors' current title is "Nerve Blocks in Elderly Patients with Trigeminal Neuralgia". I do not think the current title covers the article. The authors mention in the purpose of the abstract that the purpose of the article is to review surgical procedures for RF, PRF and other patients with TN. The authors then used the discussion section of the article to focus on 4 directions to sort out: 1) RF versus PRF;

2) RF versus other surgical procedures; 3) trigeminal nerve blocks, anticoagulation, and antiplatelet agents; and 4) temperature settings for RF.

Based on the above, I suggest that the authors readjust the title of the article so that it covers the full text and is not too narrow.

Reply 8:

We changed title to “Treatment of trigeminal neuralgia in older adults: a narrative review based on literature published between 2005 and 2021.”

Comment 9:

Abstract:

Consider add "English filter" information to the method?

Reply 9:

We used “English” as a filter in your Pubmed search. We conducted a PubMed search using only English for studies published between April 2005 and September 2021 on trigeminal neuralgia treatment via radiofrequency thermocoagulation and pulsed radiofrequency using the following search terms:

Comment 10:

Also, "This review did not include studies indexed in databases other than PubMed. "This sentence should be placed in Methods in the abstract, not in the results.

Reply 10:

The following sentence was placed in the Method section.

"This review did not include studies indexed in databases other than PubMed. "

Comment 11:

In addition to presenting the 32 studies included, we need to present our review based on these studies, our main content and findings, and in particular, we need to present the main findings in the 4 areas of Discussion, in this section.

Reply 11:

The following sentence were placed in the Result.

The main findings of this review suggested that pulsed radiofrequency combined with radiofrequency thermocoagulation has greater safety and efficacy than pulsed radiofrequency alone. Pulsed radiofrequency combined with radiofrequency thermocoagulation could provide analgesia for medically compromised patients with trigeminal neuralgia undergoing surgery. The pain recurrence rate of radiofrequency thermocoagulation was 80%, 75%, and 73% after 1, 3, and 5 years, respectively, with microvascular decompression yielding a higher 5-year pain relief rate than radiofrequency thermocoagulation. Finally, 68°C was a good choice for radiofrequency thermocoagulation of V2/V3 for trigeminal neuralgia treatment.

Comment 12:

More caution is recommended regarding the conclusion. The authors recommend a combination of RF and PRF for trigeminal neuralgia in the elderly. But we know, also

as the authors write, that "According to international guidelines, surgical treatment may be effective when drug therapy is unavailable or insufficient and is recommended as second-stage treatment.", surgical treatment is the alternative. So in the conclusion in the abstract, this needs to be stated, i.e., we recommend xxxx when drug therapy is unavailable or insufficient.

Reply 12:

We have added following statement.

We recommend combination with PRF and RF when drug therapy is unavailable or insufficient.

Methods:

I looked at the JOMA requirements for literature review

<https://joma.amegroups.com/pages/view/guidelines-for-authors#content-2-2-2> and found that authors may need to add a table to present more transparently search strategy. Although this is not a systematic review, I agree that such a disclosure would be more transparent, comprehensive, and clear in presenting the strengths of this article.

Reviewer B:

The article is a very well written, clinically relevant narrative review on use of nerve blocks for management of TN in elderly patients.

Comment 1:

The authors are commended on the comprehensive coverage of the topic.

My only suggestion would be for the authors to consider adding a figure for the procedure if they have a case with informed patient consent or alternatively, a diagnostic treatment paradigm or a table with core ideas may be presented which may be visually very helpful for the readers.

Reply 1:

We have added Figure 1-3.