Reviewer’s report

Title: Perioperative use of gabapentinoids for the management of postoperative acute pain: protocol of a systematic review and meta-analysis

Version: 0 Date: 15 Aug 2018

Reviewer: Sofie Louise Rygård

Reviewer's report:

Verret et al: Perioperative use of gabapentinoids for the management of postoperative pain: protocol of a systematic review and meta-analysis

Thank you for the possibility to read and comment on this protocol. The manuscript is well written with sufficient details and an easy to follow structure. I have some comments and suggestions and I will present them for each section:

Abstract: use of the term 'side effects' as a secondary outcome is somewhat misleading. You also use the term adverse effects in the methods section, under secondary outcomes. As there is a difference between side and adverse effects, I suggest that you stick to adverse effects (I recon the analgesic effect of gabapentinoids is a side effect of the anti-epileptic drug).

Introduction: the word side effects is again used for the adverse effects of opioids and gabapentinoids - could you consider re-phrasing?

The introduction describes the core of the problem and states the importance and the urgency of this review.

Methods:
The choice of an aim that has a patient centered focus (with the patient centered primary outcome) should be commended. Though, it is not clear to me if the postoperative pain measurement will be both with patient reported tools and observational (clinical) tools? If you could specify this in both the primary and secondary outcomes, please? If you plan to mix the tools in the primary outcome, I would suggest an exclusively patient reported outcome to be very relevant as a secondary outcome.

Inclusion/exclusion criteria: you could consider not to exclude studies based on outcome. There is also a great value of a systematic review, that contains all eligible trials on the subject, and where the problem with non-clinically relevant or non-patient-centered outcomes is addressed in a descriptive section of the results. Also, some authors may hold the outcomes of interest in a non-published form.

Would you consider to exclude cross-over trials where both groups are treated with the intervention of interest (as a theoretically issue)?
Search: how about conference proceedings (from the relevant conferences for the last 10/15 years?); ongoing trials found in clinical trial registries (hence, no restriction regarding publication status)?

Data extraction: I would suggest extracting the following study characteristics: year of publication, countries participating, number of sites, total number of included patients, setting, types of patients, comparison drug (placebo, usual care, other drug).

I assume that you will prioritize data obtained from authors then data presented in other systematic reviews w meta-analysis (maybe the authors can confirm the correctness of this type of data) and lastly, extraction from diagrams or graphs using a web application.

Risk of bias assessment: will you judge the trials as overall low or overall high risk of bias, and do you plan to report a Risk of bias summary and Risk of bias graph? Will you perform your primary analysis only with the trials judged as overall low (if none are overall low, then a pre-defined cut-off for overall 'lower' risk of bias). This part of the methods section very important, especially as you state in the introduction, that you wish to use your systematic review to inform the recommendations. Hence, you should be very accurate on how you plan to judge and report the risk of bias in the included studies, and how you plan to support grading the quality and strength of your recommendations (when using the GRADE tool).

Random errors: have you considered to include a sequential method (e.g. Trial Sequential Analysis) to account for random errors due to sparse data and repeated testing (in multiple meta-analyses)?

Subgroup analysis: very good considerations regarding testing for sources of heterogeneity. I suggest adding a subgroup analysis of trials with overall low risk of bias versus overall high risk of bias to assess the effect of bias on the estimates.

I assume you only plan to perform Funnel plot if ten or more studies are included.

With a few corrections and adjustments, this will become a SR w MA of great clinical importance, appropriate transparency and of very high quality.

Level of interest
Please indicate how interesting you found the manuscript:

An article of importance in its field that should be highlighted to relevant networks

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:
1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal

Were you mentored through this peer review?

No