Peer Review File

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Reviewer A

Review studies are necessary to do further steps for popularize the benefits for acupuncture. We would like to contribute with our observations and revision to the authors efforts.

Here are our observations, in addition to the reviewed text (see below):

- A high dropout rate and a low number of participants (Ye, 4), a limited follow up period might be evaluated as is critical limitations.

ANSWER: We´ve included in the discussion (lines 276-279): "For example, in the study by Ye et al., 2013 (4), although the dropout rate was low (only two participants did not complete the study), there was a small sample size and patients were followed for a short period of time, which may have influenced the results."

- The RC has got a lower level of evidence than the RCTs.

ANSWER: Although the inclusion criteria admitted CR, as shown in the results, only controlled clinical trials (RCTs) were included. And this also happened in the systematic review included.

- We think that the professional qualification and experience of the reviewers should be indicated in the review.

ANSWER: We´ve complemented the information in identifying the authors(lines 3-20):

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- Regarding the point selection - which criteria were used for the selection of the auricular points throughout the studies? Was the point selection made by syndrome differentiation or other considerations, for example, points that have been proven to be efficacious? It is an important aspect which influences the studies' outcome.
ANSWER: We´ve inserted the following section in the discussion (lines 308-313): "Overall, the studies did not describe the criteria for choosing the points used in the intervention groups. However, all studies used the lumbar point as a reflex action point in low back pain, combined with autonomic action points such as shenmen, sympathetic and subcortex. Only two studies (VAS et al., 2019; WAN G et al., 2009) used the kidney point, which follows syndromic differentiation criteria by traditional chinese medicine."
- Regarding the treatment protocol of the reviewed studies, it is not clear if the participants were only treated with semipermanent needles or seed embedding or if they were additionally treated (once a week) with acupuncture needles.
How was the compliance (stimulation by pressing the seeds by the participants) supervised?
ANSWER: We´ve inserted the following section in the discussion (lines 304-308): "All studies evaluated the efficacy of auricular therapy alone, with seeds (14, 15, 16) or retaining needles (4,17,18), without combining it with other treatments. In general, patients who used the auricular acupressure technique, as opposed to those who used retention needles, were instructed to press the stitches during the week, but did not receive supervision or verification of compliance with this guidance".

- The control groups were treated with acupuncture at nonspecific points. Although you mentioned the methodological risk of bias of this control method, perhaps it would be worth to give further explanation.
ANSWER: We´ve inserted the following section in the discussion (lines 314-326): "Most of the studies analyzed used non-specific points in the control group as sham points, except for two studies that compared the intervention group with standard therapy (14,15). We emphasize that there is evidence that non-specific points can also have a therapeutic effect on pain control and even in other conditions. Therefore,

different points in any region of the ear, such as in the auricular periphery, where innervation of the spinal and trigeminal branches predominates, or points in the auricular center, where innervation of the auricular branch of the vagus nerve predominates, can activate endogenous mechanisms and promote analgesia (22). The use of "sham points" in auriculotherapy seems not to be inert, which can reduce the difference obtained between the control and intervention groups. This leads to an underestimated outcome bias when studies use sham-auriculotherapy with stimuli at non-specific points. Also, when it comes to TA, the proximity of the points is quite small. Even so, the use of nonspecific points in the control group is still the most used methodology in clinical studies of AT (22)."

Reviewer B

- This systematic review has been well organised with an impressive list of databases searched and effective quality assessment of the selected trials using adapted SIGN. It is generally well and logically written, and easy to read.

However, I have a few suggestions for improvement, notably concerning abbreviations, which have been reversed or changed in a number of places.

Page 7, line 146: Give CG in full for first use – "control group"

ANSWER: adjusted

Page 7, lines 149 and 156: Should be SR not RS.

ANSWER: adjusted

Page 8, line 163: Should be SR not RC

ANSWER: adjusted

Page 8, lines 169 and 170: What is APS? PHC (primary health care)

Page 5, line 84 – we included initial PHC (primary health care)

ANSWER: adjusted

Page 9, line 188: give ref number at end of sentence (5).

ANSWER: adjusted

Page 10, line 211: Add the abbreviation (BQ) after poor quality.

ANSWER: adjusted

Line 213: This sentence is a repetition of one in the paragraph above.

ANSWER: adjusted, deleted sentence

Line 218: Replace “one” with “small 2013 pilot trial”
ANSWER: adjusted

Line 229: Change to “previous acupuncture studies for low back pain.” ?
ANSWER: adjusted

Line 231: Add at end of sentence “…results, although showing less benefit than the 2013 pilot trial.”
ANSWER: We accept the suggestion and include this excerpt (lines 238-239)

Page 11, 3rd paragraph, final sentence (lines 250-2): Vas and Wang are from different units and 10 years apart, so can not be combined in this way. I suggest deleting this sentence.
ANSWER: We revised the sentence and fixed the wording (lines 256-258) “It is worth noting that the Vas et al study is the most recent among those included and also has the largest sample size, with 220 participants.”

Page 12, line 275: Add “… quality (Charts 1 and 2).”
ANSWER: adjusted

Page 12 line 268 and Page 13 line 283: Should LD be LBP?
ANSWER: adjusted

Page 13, Conclusions, line 303: Change to “…such results are probably not generalisable and should be evaluated with caution. More robust…”
ANSWER: We accept the suggestion and change the sentence**.**

Table 2: RS or SR?
ANSWER: adjusted

Table 3: In sample dropout EG and CG have been reversed.
ANSWER: adjusted

Table 3: In both intervention lists, the Yeh papers have been listed as having needle acupuncture - it was auricular seed therapy.
ANSWER: adjusted (Auriculopressure with seeds on specific points.)

Chart 2: “1.2” has been used twice
ANSWER: adjusted

Page 12: I suggest something similar to the following should be inserted as a new paragraph after line 273.
“The high dropout rate in most of the trials suggests that patients found auricular acupuncture or seed therapy to be uncomfortable and were unwilling to persist with their treatment. It may be that these particular patients felt they were getting no benefit

ANSWER: We've included the following on lines 281-284 in the discussion: “ The high dropout rate in two trials (Yeh et al 2014 and 2015) (17,18) suggests that patients found auricular acupuncture or seed therapy to be uncomfortable and were unwilling to persist with their treatment. It may be that these particular patients felt they were getting no benefit.”

- It is not clear if the trials used “intention to treat”, lack of which could have affected their results.”

ANSWER: Figure 03 - Quality of the Randomized Clinical Trials presents data in relation to the intention-to-treat analysis in detail, specifying which studies did and which studies did not include such analysis. Even so, we inserted a final comment into the discussion including this question (lines 327-334), just before the conclusion: “Finally, several elements suggest caution: only 6 studies were included (despite the high sensitivity of the search); short follow-up time; few participants; 2 studies with high dropout rates; 3 did not have their results analyzed in intention-to-treat and 3 were from the same author. On the other hand, the 5 high-quality RCTs used sham in the control groups, which systematically minimizes differences in comparisons. And clinically and statistically significant better results were obtained in the experimental groups of all studies. With these findings, we assess that the overall balance is in favor of auriculotherapy as an effective complementary treatment, albeit temporarily.”

Page 12: I suggest something similar to the following should be inserted as a new paragraph after line 282.
“Of the six RCTs considered in this review, one was shown to be of poor quality, two were conducted on pregnant ladies, and the remaining three were from the same author in successive years. Thus the combined results are unlikely to be generalisable.”

ANSWER: We´ve accepted the suggestion and included this excerpt in the lines 293-296: “Of the six RCTs considered in this review, one was shown to be of poor quality, two were conducted on pregnant ladies, and the remaining three were from the same author in successive years. Thus the combined results are unlikely to be generalizable.”