Reviewer's report

Title: Treatment outcomes of single-visit versus multiple-visit non-surgical endodontic therapy

Version: 2 Date: 29 October 2015

Reviewer: Giovanni Lodi

Reviewer's report:

Dear Sir,

The manuscript: Treatment outcomes of single-visit versus multiple-visit non-surgical endodontic therapy by Wong and colleagues is a report of a randomized controlled trial on patients undergoing endodontic treatment, comparing a one-visit approach with a multiple-visit one, thus it falls within the scope of BMC Oral Health and it is likely to interest the readership of the journal. However, in my opinion, the study would benefit from some changes, before being suitable for publication.

My main suggestion is to rewrite the manuscript following the CONSORT guidelines for randomized controlled trial report, a set of recommendations that represent the international standard in RCT reporting and will contribute to improve its completeness and transparency. You can find it at http://www.consort-statement.org/home/

In addition:

TITLE
• I would add “a randomized controlled trial”.

ABSTRACT.
• Please include more details on main findings, including results for each outcome, including estimated effect size and precision (such as 95% confidence interval).
• In my opinion, the conclusion is not supported by the results of the study (see Result section).

MATERIALS AND METHODS.
• Provide more details on random sequence generation and allocation concealment methods (see CONSORT).
• Patients recruitment. Please provide clearer inclusion/exclusion criteria. For instance, it is not clear to me whether vital teeth in need of endodontic treatment were included or not. In addition, what happened with patients who needed more than one endodontic treatment? Were they randomized more than once?
• Clinical procedure. Were multiple-visit treatments always two-visit treatments. If not, under which circumstances it was decided for a longer treatment?
• How the duration of the intervention was measured? Authors should state starting and ending points.

• What (if any) medication (FANS, antibiotics) was recommended following treatment and in which circumstances?

• Evaluation. This section is particularly confused. It appears that the first data were collected after six months. If this is true, it makes sense for the radiological outcome, but it does not for clinical outcomes, and for pain in particular. Didn’t Authors recorded pain immediately (6, 12, 24, 48 h) and in the first week following treatment? What do the Author mean by “incidence of pain” (line 177).

RESULTS

• How many patients were enrolled?

• Please specify reasons of patient lost at follow-up (line 182).

• Please provide information on time when the outcome (success, pain) was recorded.

• The methods of the reliability were not reported in the M&M section.

• Tooth lost is a very important outcome, why it was not included among the outcomes of the study in the M&M section.

• How did Authors explain the difference in gender distribution between groups? Is it a possible sign of some unknown bias?

DISCUSSION.

• Too long. Make it shorter.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests