Reviewer's report

Title: Clinical complications during treatment with a modified Herbst appliance in combination with a lingual appliance

Version: 3 Date: 18 August 2015

Reviewer: Heike Korbmacher-Steiner

Reviewer's report:

Dear authors,

Thank you for your paper! Although it is clearly written, I have some complaints about some issues.

MINOR ESSENTIAL REVISIONS

1. I recommend professional editing for the manuscript.
2. The manuscript should be submitted, according to Head and Face Journal style, in block set.
3. Please maintain to the recommended citation style of Head and Face Magazine.
   http://www.head-face-med.com/authors/instructions/research#formatting-references
   „All references, including URLs, must be numbered consecutively, in square brackets, in the order in which they are cited in the text, followed by any in tables or legends.“

MAJOR COMPULSORY REVISIONS

1. In this study only a lingual WIN-Herbst modification was tested. However the authors state in their clinical conclusion, that “the WIN-Herbst appliance was found to be superior to comparable vestibular Herbst appliances”. According to the authors this conclusion is based on comparative studies.

   In the present study all patients were treated in one orthodontic practice, which is specialized in lingual therapy. The limitation of such a single-center approach results in the expected superior qualification of the technical staff and the clinicians. A multi-center design would have been desirable at this point, best case with a comparison of a buccal anchored Herbst-appliance in different practices to ensure better comparability for the reader. If this is not possible, the authors should mention this limitation in their manuscript.

2. References and contents of cited sources:

   Silva et al.: Page 3 original publication Fulltext-pdf: „For all patients, the Herbst appliance was activated initially to an edge-to-edge incisor relationship and was used for a mean of 12 months (SD 2.15 months; range, 10 to 18 months)”. This different activation might have an impact on complications and should at least be stated in the table.
Furthermore, I may remark that (see table 1 in the cited article) 58.8% of the lower cantilever Herbst group had 0 „complex complications“. In order to clarify the different appliances (a removable mandibular splint versus a fixed WIN-system) a comment on the different designs should be mentioned in the table file.

Although taking all these issues into account, I can highly suggest to accept this manuscript, because -as the authors stated- lingual therapy is up to date and the modification of the Win-system is interesting for many readers. However, I have to return this manuscript to the authors with minor revision because the above mentioned limitation (especially the conclusion “Win-Herbst is superior to competing systems”), necessarily needs to be attenuated throughout the whole paper to allow an appliance independent comparison.

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests