

## Peer Review File

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### Reviewer A

1. The efforts of the authors in writing a comprehensive literature review with case illustrations is appreciated.

Kindly add that it is a literature review with case illustration in the title.

Reply 1: The title of the manuscript was change to “Orthopedic Treatment of Class II Malocclusions: A Clinical Practice Review” to conform to the literature review with case illustration format of the paper. Thanks.

2. Kindly add subheading of Introduction.

Reply 2: Subheading was changed to “Orthopedic treatment of Class II Malocclusions”

3. Was there any literature review search strategy?

Reply 3: A literature search was done on the latest literature search on the subject of the specific fixed Herbst appliance described in this review and the relatively new removable MA appliances which have only a few publications in the literature.

4. Fig 7 needs alignment

Reply 4: Figure 7 has been re-oriented and aligned. Figure 8 has similarly been oriented as well.

### Reviewer B

1. I found this paper to be interesting, and well written. My only concern is that the data presented are anecdotal at best as it is simply a comparison of two cases. The results seem to be a foregone conclusion as evidence is presented that the both the Herbst appliance and the Invisalign MA are designed to achieve good results.

Reply 1: Thank you for the reviewer’s comment. This is a paper is meant to be a literature review contrasting the relatively new removable Mandibular Advancer (MA) appliance on the market with few publications to the conventional treatment of Class II malocclusions with fixed functional appliances. The comparison of a fixed Herbst appliance to a removable functional appliance with two clinical cases may be of interest to readers who are incorporating more clear aligners treatment in their practices. The concept illustrated the fact that either appliance design was capable in achieving a

decent correction of overjet and overbite in Class II malocclusions with mandibular deficiency. The treatment changes presented are for the individual clinical case and are in no way generalized to the presumption that this reflective of all treatments with these appliances.

### **Editorial Comments**

1. Given that there are many similar articles have been published in this field (PMID: 25820407, 34145968, 36498570), please highlight the novelty of this review in the introduction. What does this review add to existing knowledge? How does this review differ from previous reviews?

Reply: This Clinical Review contrasted the relatively new removable Mandibular Advancer (MA) appliance on the market with few publications to the conventional treatment of Class II malocclusions with fixed functional appliances. The comparison of a fixed Herbst appliance to a removable functional appliance may be of interest to readers who are incorporating more clear aligners treatment in their practices. The concept illustrated the fact that either appliance design was capable in achieving a decent correction of overjet and overbite in Class II malocclusions with mandibular deficiency.

2. There are many other appliances (PowerScope 2, MARA and etc.) for the orthodontic treatment of Class II molars. Why do you discuss the Herbst and MA of functional appliances in this article?

Reply: Thank you for the excellent comment. There are indeed numerous fixed and removable functional appliances available for treatment of Class II malocclusions with mandibular deficiency. The objective of this Clinical Review is to contrast a relatively new removable MA appliance with the conventional fixed Herbst appliance. Both of these appliances sequentially advance the mandible into a forward position for Class II correction. This treatment modality may be of interest to the increasing number of clinicians using clear aligners for treatment of Class II malocclusions.

3. Though it is a review, a separate section on the STRENGTHS and LIMITATIONS of this review is highly recommended. We think this could promote a more intellectual interpretation.

Reply: The authors concurred with the reviewer's comment. We have contrasted the strength and limitations of this review in the Discussion section.