

Response to Letter

Re: The Class II Carriere Motion appliance: A 3D CBCT evaluation of the effects on the dentition. Daniel Areepong, Ki Beom Kim, Donald R. Oliver, Hiroshi Ueno. *Angle Orthod.* 2020;90:491–499.

Thank you for your interest in our paper.

Extrusion of molars were mentioned twice in the Discussion, and once in the Conclusion. Actually, as shown in Table 4 and as you pointed out, the mesobuccal cusp tip of the mandibular molars showed statistically significant intrusion from T1-T2 (–1.69 mm and –1.79 mm on average, in Groups 1 and 2, respectively), probably due to the mesial tipping of the mandibular first molars (3.68° and 3.67° on average, respectively).

1. Treatment protocol with the CMA was the same at all three offices. The CBCT was taken within 1-3 months prior to treatment (T1). Then, the CMA was placed bilaterally along with a hook or molar bracket on the mandibular first molar. An Essix retainer was used as anchorage on the mandibular dentition. 1/4" 6 oz. elastics were used for the first month followed by 3/16" 8 oz. elastics after the first month

until both Class I molar and canine relationships were bilaterally achieved. A CBCT image was then taken at the completion of CMA usage with the achievement of bilateral Class I molar and canine relationships (T2).

If a patient had a unilateral Class I molar and Class II canine on the Class I molar side, the CMA was still bonded and used until a Class I canine relationship was achieved on that side. However, elastic protocol was to use 1/4" 6 oz. elastics for the Class I molar side.

2. Class II elastics with fixed appliances flare mandibular incisors, reducing both overjet and overbite. Similarly, CMA seems to have proclined mandibular incisors. We did not investigate the anteroposterior movement of mandibular incisors in this research.

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