"prescribed" full-time and part-time wear protocols throughout the article and in the conclusion section. Our aim was to compare the responses and compliance to varying wear instructions in a real-world scenario. Clearly, compliance was suboptimal in both groups. This finding is intuitive and resonates with a number of recent studies involving objective wear assessment with removable appliances.[1,2] Although we all hope for diligent, full-time wear of removable orthodontic components, we have yet to meet the unicorn who actually does so.

The sample size calculation was based on detecting a 2-mm difference between the 2 groups as a result of the intervention (not, as the writers intimate, on a total reduction in overjet values). We feel this level of difference between the 2 groups as a result of intervention would indeed be clinically relevant and significant.

It was also suggested that there was a risk of contamination bias, because subjects were recruited from the same peer group. Although this is conceivable, we do not believe this to be likely, because recruitment and subsequent random allocation were done within a large department with a broad catchment area. Though we cannot exclude this possibility, it is highly unlikely that participants were derived from the same peer group. Special measures to mitigate potential contamination bias were therefore not deemed necessary.

Finally, the writers refer to the use of the ANB angle as a measure of skeletal response and suggest the use of articulare gnathion. We did record articulare gnathion for completeness in relation to baseline data. We assessed the skeletal response inferentially using a combination of the ANB value, Pogonion-Sella vertical, and A-sella vertical, which are commonly used techniques for assessment of skeletal response. It is important that a finite number of key cephalometric outcomes be included in orthodontic research studies; an excessive number of outcomes can result in problems related to multiple hypotheses with associated likelihood of false positive outcomes. Moreover, interrelationships do exist between cephalometric variables.

Like the writers, we do not believe that now is the time to rejoice; however, we do feel this research has shed new light on wear regimes and their associated effects. Coupled with the findings from our complementary qualitative study,[3] we continue to advocate near full-time wear during Twin-block therapy. However, armed with the knowledge that removable wear regimes are effective, we now tend to taper the introduction of the appliance during the initial weeks to reduce imposition of the appliances. Moreover, where wear is not forthcoming and the onus of full-time wear is a barrier, we will now suggest graduating to a nights-only regime before considering alternative means of Class II correction. Overall, our findings represent an incremental gain in our appreciation of the effects of wear regimes and the impact of functional appliance therapy; however, as ever, further research is required to better understand this.

Pratik K. Sharma
Padhriag S. Fleming
London, United Kingdom

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Craniofacial growth spurt in Class I subjects: Data vs conclusions

The study by Montasser in the April 2019 issue (Montasser MA. Craniofacial growth spurt in Class I subjects. Am J Orthod Dentofacial Orthop 2019;155:473-81), reports on the diagnostic performance of the cervical vertebral maturation (CVM) method in the identification of the mandibular and maxillary growth peaks in growing subjects. As in many other studies, longitudinal records from the American Association of Orthodontists Foundation Craniofacial Growth Legacy Collection were analyzed. The author concluded that "...presence of CVM3 would indicate the peak of the growth spurt..." and that the results showed the "validity of

Table. Diagnostic accuracy of the CVM3-CVM4 interval in the identification Co-Pog peak

	Age intervals, y						
Sex	*9-10*	*10-11*	*11-12*	*12-13*	*13-14*	*14-15*	*Overall*
Males (n = 14)	–*	1 (1-1)	0.71 (0.48-0.95)	0.36 (0.11-0.61)	0.36 (0.11-0.61)	0.71 (0.48-0.95)	0.63 (0.41-0.83)
Females (n = 12)	1 (1-1)	0.58 (0.30-0.86)	0.58 (0.30-0.86)	0.33 (0.07-0.60)	0.42 (0.14-0.70)	–*	0.58 (0.33-0.83)

Note. Data are presented as mean (95% CI).
Co-Pog, condylion-pogonion.
*Indicates not included.

the CVM method in predicting the pubertal growth spurt."

To conduct a diagnostic performance analysis, Montasser followed the procedure initially described by Perinetti et al[1] (although not acknowledged). Despite this effort, the conclusions did not appear to be supported by the data. As a representative example, data related to the condylion-pogonion increments may be considered, where diagnostic accuracy values for the CVM3-CVM4 interval (Table III in Montasser's article) ranged from 0.33 to 1.0 (including both sexes). Most of these values were less than 0.71, which is far from being representative of a reliable diagnostic method. By using the data reported in the article, the overall diagnostic accuracy values (across all age ranges), along with the 95% CIs, have been calculated[2] (Table). These overall mean values are extremely low, with 0.63 and 0.58 for males and females, respectively.

The unpredictable variable duration of each CVM stage (as for every stage-based radiographic growth indicator) was not discussed at all, even though this would be a noteworthy limitation of the clinical applicability of the CVM method.[3] Whereas full transparency when investigating such a controversial issue would be preferable, no data has been reported on the linear measurements, either for each case or as a whole.

The present study shows only a correlation between the CVM and growth, which cannot be confused with diagnostic accuracy of a given CVM stage in the identification of an imminent growth peak.[4] Therefore, the data reported in the article support only the poor validity of the CVM method in predicting the pubertal growth spurt.

Giuseppe Perinetti
Nocciano (PE), Italy

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Author's response

I appreciate the feedback about my article "Craniofacial growth spurt in Class I subjects" (Am J Orthod Dentofacial Orthop 2019;155:48-56). In response, I will start by addressing the point raised about transparency in data reporting. Linear measurements of growth increments were not presented based on the extent to which this data would serve the research objectives. Presenting the data as I did in the article was justifiable because the focus of the study was not on numbers or amounts, but on the presence (positive) or absence (negative) of a certain event. Therefore, details about the criteria and method used to determine the peak of the growth spurt were required and fulfilled. Authors should have been aware that presenting the data differently than what they thought to be the right way should not be considered as a violation of transparency in such a hasty manner. Although, linear measurements were presented in previous studies in the main manuscript[1] or in appendix[2], the method of data presentation used in my article was also established in the literature.[3]

The accuracy of results should not be interpreted in isolation but in conjunction with other predictive values.