# Letters From Our Readers

**To: Editor, *The Angle Orthodontist***

**Re: Evaluation of mandibular volume using cone-beam computed tomography and correlation with cephalometric values. K. Katayama, T. Yamaguchi, M. Sugiura, S. Haga, K. Maki. *The Angle Orthodontist.* 2014;84(2):337–342.**

We read with great interest the article, ''Evaluation of mandibular volume using cone-beam computed tomography and correlation with cephalometric values''. We would like to congratulate the authors of this cone beam computed tomography (CBCT) study. The authors compared the maxillofacial morphology and mandibular bone volume in patients with different skeletal malocclusions. In agreement with the authors, there have been few studies investigating the relationship between mandibular volume and lateral cephalograms based on skeletal classification. Thus, the study gives valuable information, finding that mandibular volumes among skeletal Classes I, II and III were not significantly different. However, there are some other considerations to which we would like to draw attention.

The authors included patients with a wide range of mandibular plane angulations in this study. According to Nair et al.,[1] maxillary and mandibular volumes differ between hyper and hypodivergent skeletal patterns. The hypodivergent group had a significantly higher ratio than that of the hyperdivergent group. This means that different skeletal vertical patterns might have affected the results of this recent study.

Furthermore there was no information about the skeletal components of the Class II and Class III malocclusions in this study. In a published study,[2] skeletal Class III can be characterized by different combinations of maxillary and mandibular spatial and size relationships. Also, the same may be true for skeletal Class II relationships.[3] This range of diversity of skeletal Class II and Class III malocclusions may have great effects on mandibular volumes.

Finally, the authors should consider performing the Kolmogorov-Smirnov test to determine homogeneity of data and then decide to perform parametric tests.

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## REFERENCES

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2. Ellis E 3rd, McNamara JA Jr. Components of adult Class III malocclusion. *J Oral Maxillofac Surg*. 1984;42(5):295–305.
3. McNamara JA Jr. Components of Class II Malocclusion in Children 8–10 Years of Age. *Angle Orthod*. 1981;51(3): 177–202.