canine retraction until both canines were retracted to Class I relationships in order that we could use symmetric mechanics.

Delay of treatment was a question not answered before the study results were obtained. This design decreases biologic variability among groups because the patient is his own control. Using the contralateral side as a conventional control is a protocol previously used in the literature.\(^5\)

**Readers’ forum**

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**Table.** Means, standard deviations, and results of \(t\) tests for comparison of age between groups

<table>
<thead>
<tr>
<th>Corticotomy group</th>
<th>Piezocision group</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean</strong></td>
<td><strong>SD</strong></td>
</tr>
<tr>
<td>Age</td>
<td>20.7</td>
</tr>
</tbody>
</table>

I was interested to read the article by Dindaroğlu et al in the May 2016 issue of the *Journal*. The authors used 3dMD Flex (3dMD, Atlanta, Ga) to obtain 60 stereophotogrammetric images from the same participant to evaluate the reproducibility of the lip position at rest in 3 dimensions with reverse engineering software and stereophotogrammetric images. Segmentation of the upper and lower lips and the 3-dimensional deviation analysis were performed with Geomagic Control (3D Systems, Rock Hill, SC) software. The Shapiro-Wilk test, paired sample \(t\) test, Bland-Altman plots, and Wilcoxon signed rank test were used for statistical analysis.

Reliability (repeatability or reproducibility) was assessed by different statistical tests, such as paired \(t\) test; this is a common mistake in reliability analysis.\(^2\) Briefly, for quantitative variable intraclass correlation coefficients and for qualitative variables, weighted kappa should be used with caution because simple kappa has its own limitations.\(^2,\(^3\)

The authors also reported that 30 images were obtained in 3 sessions on the same day, and the procedure was repeated 6 weeks later for 30 more images. They found no significant difference between the 2 time points; this is another mistake.\(^2,\(^3\) Regarding reliability, it is crucial to know that an individual-based approach instead of a group-based (mean) approach should be considered.\(^3\) Therefore, intraclass correlation coefficient single measures, instead of average measures, should be reported to correctly assess the reliability. In other words, the possibility of getting no significant difference (mean) of a variable between 2 time points with no reliability is high. Therefore, reporting a Bland-Altman plot and coefficient of variance may also be questionable.\(^2,\(^3\)

Moreover, reporting significant differences between 2 time points is a completely different methodologic issue from the clinical importance of the mentioned difference. In reliability analysis, depending on sample size, an important clinical difference can be statistically nonsignificant.\(^2,\(^3\)

The authors concluded that the rest position can be reproduced within a small range, both on the same day and between the sessions. Such a conclusion can be a misleading message. As a take-home message, for reliability analysis, appropriate tests should be applied by researchers. Otherwise, misdiagnosis and mismanagement cannot be avoided.

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**Reproducibility of the lip position at rest**

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