Author's response

I appreciate the efforts made by the authors to write the letter. Some of the comments in the letter dealt with containment measures and not with orthodontic practice. Containment measures vary from country to country, and even within a country, they may vary from week to week, depending on the local situation. Because containment measures were not part of my article, I will not comment on them, but I will respond to the issues that relate specifically to orthodontic practice.

I agree that everyone must wear a mask, whether in the clinic or outside; yet patients will need to take their masks off during examination and treatment, so the orthodontic team needs to comply with strict measures. Registration of patients' contacts is a routine practice in any dental clinic. However, registration for surveillance purposes is different, and it is usually for suspected subjects (the recommendations are updated constantly, depending on coronavirus disease 2019 situation and new discoveries, and compliance could vary between countries). The 1-m interval at the entrance is again from recommendations that will be updated and will vary depending on the country.

In terms of immediate virus testing for any suspected patient and referral to a hospital or a hotel, I think this cannot be generalized and depends on different countries' protocols and containment measures (they vary). Ultraviolet has been reported beneficial, and of course, clinic disinfection is a necessity, as mentioned in the article.

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Palatally displaced canines

In their article in the May 2020 issue, Sosars et al compared the predictive value of panoramic radiographs and cone-beam computed tomography scans for the estimation of root resorption, spontaneous eruption of a canine, and time for orthodontic traction. (Sosars P, Jakobsone G, Neimane L, Mukans M. Comparative analysis of panoramic radiography and cone-beam computed tomography in treatment planning of palatally displaced canines. Am J Orthod Dentofacial Orthop 2020;157:719-27). The article was very informative, well explained, and of great interest, but we have a few questions.

As mentioned in the Material and Methods section (p. 720), the study sample consisted of 88 patients (61 female and 27 male). However, in the Results section (p. 723), the authors report that 67 patients had resorption of 1 root, 27 patients had resorption of 2 roots, and 1 patient showed resorption of 3 teeth. These numbers add up to a total of 95 patients, which is larger than the sample size previously mentioned.

In statistics, independent variables are controlled inputs (risk factor, predictor variable), whereas dependent variables represent the outputs or outcomes (outcome variable) resulting from altering the inputs. However, in the Statistical analysis (p. 722), we read that root resorption vs nonresorption or spontaneous eruption vs orthodontic traction were the independent variables, whereas radiographic parameters were the dependent variable. We believe that the radiographic parameters should be the independent variable, and the root resorption vs nonresorption or spontaneous eruption vs orthodontic traction should be the dependent variables for this article.

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Authors' response

We thank our colleagues for their interest in our recent article and for their questions.

The first question that the colleagues addressed related to the differences in the number of the samples stated on pages 720 and 723. Indeed, the bilaterally impacted canines were pooled together as was stated on page 723, and the number of patients from there referred to the number of canines. It would be more correct to use the term "canine" instead of "patients." We are grateful to the colleagues for enlightening this imprecision.

The second question related to the definition of the variables "root resorption vs nonresorption" or "spontaneous eruption vs orthodontic traction." We defined these variables because they were used in the receiver operating characteristic curves for the independent group's design.[1]

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1. DeLong ER, DeLong DM, Clarke-Pearson DL. Comparing the areas under two or more correlated receiver operating characteristic curves: a nonparametric approach. Biometrics 1988;44:837-45.

Leukocyte platelet-rich fibrin and orthodontic tooth movement

We congratulate the authors for their notable work in the area of leukocyte- and platelet-rich fibrin (L-PRF) and orthodontic tooth movement (Pacheco AAR, Collins JR, Contreras N, Lantigua A, Pithon MM, Tanaka OM. Distalization rate of maxillary canines in an alveolus filled with leukocyte-platelet-rich fibrin in adults: a randomized controlled clinical split-mouth trial. Am J Orthod Dentofacial Orthop 2020;158:182-91). The study is significant because it takes the use of L-PRF a step ahead in orthodontics. However, there are a few concerns regarding the present study that, if clarified, might improve the clinical approach and outcome.

In the third paragraph of the introduction, the authors wrote "After extraction, the alveolus begins the process of bone resorption, initially decreasing in width and subsequently in height, to achieve a 50% reduction in the width of the alveolar ridge during the first year.[14]" However, the cited reference (Hopewell) concerns Consolidated Standards of Reporting Trials reporting for randomized controlled trials, which is irrelevant to the sentence. Similarly, in the fifth paragraph of the introduction, the authors wrote that "The anti-inflammatory properties of L-PRF may reduce the rate of OTM because OTM relies on the inflammatory process.[22]" For this important evidence, the authors cited an article by Schulz et al, again dealing with the Consolidated Standards of Reporting Trials requirements. It is disturbing to note such irrelevant references for key statements.

The sample consisted of young adult patients diagnosed with Class I or Class II Division 1 malocclusion, but nothing was mentioned about the facial pattern (hypodivergent, normodivergent, or hyperdivergent), which has a significant effect on the rate of orthodontic tooth movement and alveolar bone morphology.[1]

In the third paragraph of the introduction, the authors mentioned "50% reduction in the width of the alveolar ridge during the first year.[14]" To avoid this, various biomaterials have been used. However, in orthodontia, forces are used to induce the tooth movement immediately after extraction and not after a year or so, which minimizes the side effects related to alveolar bone resorption. This concept of socket preservation is more relevant for other branches of dentistry rather than orthodontics.

The authors claimed in the trial design section that the methodological quality of the trial was assessed by the Cochrane risk of bias tool. However, the result of the assessment was not mentioned or reported anywhere in the study.

In the outcome measurements, the method used for measuring the rate of canine retraction was not valid. The reference considered in this study was the maxillary dental midline, which itself is not a stable landmark, and this would be highly influenced by forces acting on the entire arch.

In the Material and Methods section, it has been mentioned that "the measurements were repeated 4 times…the measured distance was divided by the number of days (28), which yielded the amount of movement per month." Dividing the measured distance by the number of days could only yield the amount of movement per day, not the month.

In the statistical analysis, the Pearson correlation coefficient was used to calculate the measurement errors. In the Results section, the Pearson correlation coefficient was used as evidence of reliability to assess intrarater reliability, but Table III described the values of the intraclass correlation coefficient. It seems that the authors had mixed-up everything and tried to support the reliability of measurement method with values of the Pearson coefficient from the intraclass coefficient table because the Pearson coefficient is interclass not intraclass.[2]

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