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Print media has undergone tremendous changes in the past decade. Full-color images, high-quality paper, and modern design belong not only to fashion media but have also filtered to medical journals. By its very nature, though, medical and dental information is not terribly appealing or attractive to readers who seek short messages and bottom lines. More and more, people read only abstracts on PubMed and do not take the time to delve into the details of the research.

Clinicians are swamped by the incredible variety of information available and do not know where to spend their so-called “free” time, which has become more and more limited in the modern world. We have multichannel televisions, amazing media accessories such as tablets and smartphones, and easily accessible high-speed broadband networks that bring information to us in no time flat.

The only thing that has not and most probably will not change is the need for professional specialists to obtain updates on current findings and innovations. Peer-reviewed journals are still the most reliable sources of information on which all specialists can base their work and future studies.

Publishers and editors are seeking new ways to attract people to the mission of reading articles. One easy, handy, and technologically amazing way to add another dimension to an article is the option to link any printed article to a media file such as a video, presentation, or website by QR (quick response) code.

This issue is not only the largest ever for Orthodontics (which is now an annual publication), but also the most varied, with innovative clinical and theoretical findings. We have incorporated QR codes for several articles that will link to presentations or short videos to enhance your reading experience and knowledge. We do hope that you will love this added content.

I wish to thank my former associate editor, Dr Marc Ackerman, for his help and outstanding contribution to the journal during the past year, and I wish him the best success in the future.

Fraternally yours,

Rafi Romano, DMD, MSc
Editor-in-Chief
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Posttreatment stability in Class II nonextraction and maxillary premolar extraction protocols

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Janine Araki, DDS, MSc, PhD²
Leonardo Tavares Camardella, DDS, MSc³

Aim: To cephalometrically compare the overjet, overbite, and molar and canine relationship stability of Class II malocclusion treatment with and without maxillary premolar extractions. Method: Two groups of 30 patients each with pre- and posttreatment matching characteristics and satisfactory finishing were used. Group 1 consisted of 30 patients treated with nonextraction at a mean pretreatment age of 12.14 years, while group 2 consisted of 30 patients treated with maxillary first premolar extractions at a mean pretreatment age of 12.87 years. Lateral cephalograms obtained before and after treatment and at a mean of 8.2 years after the end of treatment were compared. Student t tests were used to compare the initial and final dental relationships of the groups and the amount of treatment and long-term posttreatment changes. Pearson correlation coefficients were calculated to investigate correlations between treatment and long-term posttreatment dental relationship changes. Results: In groups with matching canine relationship treatment changes, long-term stability of the overjet, overbite, and molar and canine relationships were similar in the groups. There were significant but weak correlations between treatment changes in overjet, overbite, and canine relationships with their long-term posttreatment changes. Conclusion: Nonextraction and maxillary premolar extraction treatment of complete Class II malocclusion have similar long-term posttreatment stability in terms of overjet, overbite, and canine and molar relationships. Key words: Class II malocclusion, extraction, stability

It has been shown that the maxillary premolar extraction protocol has a greater efficiency than nonextraction treatment of Class II malocclusions.¹ Besides efficiency, long-term stability is one of the primary goals of orthodontics, which is difficult to obtain.²,³ Studies have shown that even though improvement can be obtained through orthodontic treatment, there is a tendency for relapse to the original malocclusion, even many years after appliance removal.²,⁴–⁶ Consequently, every effort should be made to minimize the risk of compromising the results obtained through orthodontics.
Three-dimensional quantification of the force system involved in a palatally impacted canine using a cantilever spring design

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Aim: Although much imaging research has focused on the localization and management of the impacted canines, optimal biomechanics for successful recovery are not clear. The purpose of this research was to delineate the three-dimensional (3D) effects of a single force applied using a Kilroy spring on a palatally impacted maxillary canine positioned at different angulations (5 to 40 degrees) with respect to the line of force application. Methods: A dentoform cast was modified to simulate a palatally impacted canine. Load cells placed in the dentoform simultaneously measured the three forces (Fx, Fy, and Fz) and three moments (Mx, My, and Mz) on the canine. The activation range and force system attenuation were measured for eight different positions of a palatally impacted canine (5 to 40 degrees) as the canine moves toward the occlusal plane. The results were analyzed statistically. Results: The minimum activation range for the Kilroy spring was 11 mm, and the maximum was 14 mm. At all the different impacted canine positions, the Kilroy spring had a low load deflection rate and did not require reactivation for the successful management of a palatally impacted maxillary canine. Conclusion: A 3D force system at different bracket angulations (ie, different positions of the impacted maxillary canine) can be successfully quantified using the orthodontic force transducer. Quantification of the force system provides critical information for appropriate selection of an optimal appliance. Orthodontics (Chic) 2012;13:22–33.

Key words: force system, maxillary canine appliance

Maxillary canines are key in maintaining normal function, occlusion, and optimal esthetics. Due to their shape and size, they are regarded dimensionally as the most stable teeth. Maxillary canines play an important role in achieving a canine-protected occlusion. On laterotrusive movements of the mandible, only the canines of the maxillary and mandibular