Commentary

This article contains information relative to the continued tendency for the occlusion to settle following orthodontic treatment. It is a follow-up study on a previous report presented by Durbin and Sadowsky in 1986, and a similar study by Gazit and Lieberman in 1985. The Durbin/Sadowsky study involves an evaluation three months after treatment, while this study involves a review of patients one to two years after orthodontic treatment. It demonstrates adequately that settling does continue up to one to two years after orthodontic treatment, and that this settling is not limited to the three-month period after treatment. The authors felt it important to include "near contacts" in their study, stating that teeth normally do not make contact during mastication. While mastication is important, it is a relatively limited activity with damage to the occlusion being related more frequently to parafunctional activities such as bruxism and clenching rather than mastication. In that sense near contacts do not necessarily contribute to protection of the dentition during such parafunctional activities. Also near contacts may not contribute to the stability of the case. This may or may not be considered a weakness of the methods used in the study, but is something that should be considered in its review. The article also does not present a review of the different methods of recording occlusal contacts, nor does it give a rationale, for using the method that was selected.

A significant point demonstrated in the article was that the settling of cusps does not seem to occur in a lateral direction toward the deepest point of the opposing fossa. The settling appears to be more in a direct vertical direction rather than in this lateral direction. The authors appropriately point out that positioning the teeth in the best possible location prior to the completion of orthodontic treatment is essential to allow the best possible settling effect. If the orthodontist completes a case in which a slight amount of lateral settling is indicated, then it may be best to consider the use of a positioner appliance to encourage lateral tipping as the occlusion settles. This point has been emphasized in the past anecdotally by Roth and others who feel positioners allow teeth to settle in this lateral direction, eliminating molar fulcruming and allowing for more appropriate anterior contacts.

The article also has application in the area of post orthodontic equilibration. Given the fact that teeth continue to settle for one to two years after treatment, it may be a premature decision to initiate equilibration prior to this time unless the interferences are severe. The evaluation of cases with mounted study models approximately one year after orthodontic treatment allows for this settling to occur, and a more accurate assessment of the need for post orthodontic equilibration or possibly even restorative procedures can then be made.

In summary, this article was well organized, and supports the clinical observation that teeth continue to settle one to two years after removal of orthodontic appliances.

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