Retention: What's the Right Answer?

by Dr. Ed Lin

In my 12-plus years as a clinical orthodontist, I have seen several trends develop in my practice with the management of my patients. In my opinion, orthodontics today has really become a childhood rite of passage. Our adolescent patients are typically incredibly excited and nervous on the day we move them into treatment with their braces. At the appointment following the placement of their braces, either the patient or the parent will make a comment in regards to how incredibly impressed they are with the positive changes that have taken place with their treatment in such a short period of time. As we move through the course of their orthodontic treatment, we always get asked the question, "When will my braces be coming off?" And finally, one of the happiest days in a child's life is the day they get their braces removed. However, all that joy and elation is then tempered when they find out retainers are also required as part of their treatment.

One of the most difficult challenges we have always faced in orthodontics is with the management of retention for our patients. In our profession, there is really no general consensus in regards to what type of retention is better: removable vs. fixed. A recent study published in the *AJO-DO* concluded that the two most commonly used retainers in the United States are: maxillary Hawley retainer (58.2 percent) and mandibular fixed retainer (40.2 percent).[1] As we all know, there are pros and cons to both types of retention.

Without a doubt, the greatest advantage of the removable retainer is for hygiene. Regardless of the design of the removable retainer, it can be taken out of the mouth to allow the patient to floss and brush without any interference. The removable retainer will also help to maintain the arch form that has been developed during the course of orthodontic treatment. The biggest disadvantage with the removable retainer is with compliance of wear. Other negatives include its affect on speech and the appearance of the patient with the removable retainer in the mouth. Both of these factors will also impact the compliance with wear of the removable retainer. Obviously, if patients are non-compliant this will result in tooth movement.

In contrast, the greatest advantage of the fixed retainer is that it removes compliance from the picture. The fixed retainer has an aesthetic advantage, as it sits on the inside surfaces of the patient's anterior teeth. However, the biggest disadvantage is hygiene, especially over a long period of time. We all hear this complaint from the general dentists and hygienists in our communities and sometimes even from the parents or patients. Failure with the bonding of the fixed retainer can also result in tooth movement especially if the patient is unaware this has happened.

As a result, there really is no right or wrong answer when the decision needs to be made in regard to what type of retainer to use. The choice for retention really is the individual clinician's and patient's choice. My standard retention protocol involves giving the patient two removable Essix Ace retainers in the maxillary arch and bonding a mandibular fixed retainer. For my fixed retainer, I utilize a braided wire that has been heat treated to anneal the wire resulting in a very malleable and passive wire that can be adapted and bonded to every single tooth from canine to canine. If a patient makes a specific request for a certain type of retainer, I will give them that option.

Whatever the choice for retention, we must remember that stability with retention can only be accomplished if the forces that are derived from the periodontal and gingival tissues, the orofacial soft tissues, the occlusion and post-treatment facial growth and development are all in balance.[2,3,4] We must remember to reinforce to our patients that management of retention is a lifelong commitment. The only way to ensure stability with retention is to educate patients and give them options. ■

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