

THE Q.C.M. RETAINER



INDICATIONS:

Retention following orthodontic treatment has been defined by Moyers as “The holding of teeth following orthodontic treatment in the treated position for the period of time necessary for the maintenance of the result.”

Because of normal maturational changes, together with post-treatment tooth alterations, maintaining the treatment result following orthodontic treatment is one of the most difficult aspects of the entire treatment process.

In fact the research shows that most treated cases should be viewed as dynamic and constantly changing, at least through the third and fourth decade and perhaps throughout life! The rationale for holding the teeth in their treated position is to:

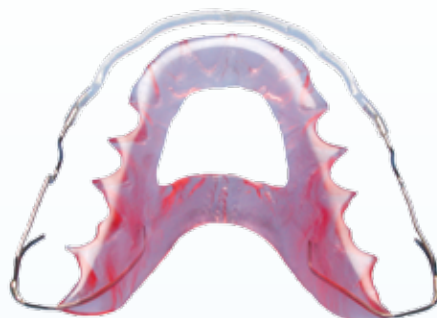
- allow for the reorganization of the gingival and periodontal tissues.
- minimize changes due to growth.
- permit neuromuscular adaptation to the corrected tooth position.
- maintain teeth in unstable positions when it is necessary due to a compromise for esthetics.

DESCRIPTION:

To be effective, a retaining appliance should meet certain objectives. It should securely retain each tooth in its new position and prevent the tendency toward relapse.

It should permit as much functional activity as possible allowing the teeth to respond in a normal physiological manner. Finally, the devices should be comfortable, have a minimal effect on oral hygiene and speech, be easy to maintain, and be as inconspicuous as possible.

The “QCM Retainer” featured in this Appliance Spotlight meets all of these criteria, and, as a result, has enjoyed a high acceptance level among both



doctors and patients. The features that make this appliance unique are:

- the highly esthetic clear, flat, labial portion that replaces the typical stainless steel wire found in most Hawley appliances.
- the labial bow is closely contoured to the labial surfaces of all the anterior teeth creating the superior retention and stability that is so critical during the first few months after the completion of orthodontic treatment.
- the “open-palate” modification allowing the tongue to achieve a normal position during speech and swallowing.
- the elimination of any occlusal interferences by using C-clasps on the most distal teeth in the arch.

TREATMENT PROCEDURES:



7. Take accurate alginate impressions of both the upper and lower arches making sure to include the distal most teeth. On the lower the cast must have good lingual extensions. These casts should be distortion free and the occlusal surfaces should be bubble-free.

2. Ideally these impressions should be taken after the brackets have been removed. When this is done, the patient should wear a vacuum formed retainer until this appliance is delivered. Some practitioners take the final impression with the brackets still in place. Although an appliance can still be made the result will be compromised.

~. Take a wax bite in centric occlusion.

4. Write up a well-thought out Rx. Keep in mind that this appliance is ONLY to be used as a final retainer. Do not attempt to accomplish minor tooth movement procedures with this appliance.

5. Upon receiving the appliance back from the lab, check to see that it fits the working model that has been returned with your appliance. Verify that the clasps are closely adapted and that the QCM labial is in tight contact with the anterior teeth. This step is especially important if the final impressions were taken with the brackets still in place.

6. Once the appliance is inserted, check the adaptation of the clasps, labial bow and acrylic.

7. At the appliance delivery visit, show

the patient how to carefully insert and remove the appliance. This is necessary to prevent them from distorting the labial bow. Although the appliance is quite strong, it can be damaged if handled roughly.

8. Remind the patient to keep the appliance clean by soaking it daily in a good retainer cleaner. Caution them not to use HOT water when cleaning the appliance as hot water could cause the labial bow to distort.

9. Final retainers are routinely worn full time for three to six months, part time for one year to 18 months, followed by continued wear twice a week. Advise your patients that this pattern should be maintained as an insurance policy against post-treatment changes in the dentition.

Adjustment Tips:

1. The clasps can be easily adjusted with a 139 bird beak plier. If the clasps are tightly adapted and more retention is still needed, consider the addition of composite build-ups just occlusal to the contact point of the clasps.

2. If you wish to tighten the labial bow up against the anteriors, simply close the adjustment loops.

3. If you wish to modify the clear labial portion that contacts the anteriors, do so with caution!

Place the appliance back on the working model and carefully use a hair dryer, on the HOT setting, heating only one side of the arch at a time. Watch the clear material closely as you heat it. Once you see it begin to soften, immediately contour it against teeth on the working model, using finger pressure or a #7 spatula.

Contra-indications and Concerns:

1. Remember, this is to be used only as a post-orthodontic final retainer for patients who have a full complement of teeth. Patients still in the mixed dentition or adults who still have teeth that are erupting, should not use this appliance.

2. If the appliance is desired for one arch only, it is extremely helpful to have an opposing model included with your prescription. This is particularly helpful when a lower appliance is desired as sometimes the lack of anterior/vertical dimension is of concern.

Lab Requirements and fees:

To achieve a successful result with

this appliance just follow the treatment procedures listed above. An accurate set of models along with a centric occlusion bite and a wellthought out written Rx is all that is needed for the lab to successfully fabricate the appliance.

Because the lab fee is slightly higher for this appliance than the average Hawley retainer, we recommend that you increase your fee appropriately. Remember your patient will appreciate your extra effort to give them an esthetic result.

SUPPLY LIST

- Acrylic Burs*
- Acrylic Polishing Burs*
- Acrylic Repair Kit*
- Pressure Pot*
- 139 Bird Beak Pliers*
- Three Prong Pliers*
- Wire Cutter*
- Stiff Robinson Brush*
- Retainer Brite*
- Sonic Appliance Cleaner*
- Patient Appliance Care CD*
- Patient Calendar Booklets*
- Colored Retainer Cases*

