



TECHNICAL GUIDE



Halterman Appliance

Description:

The Halterman appliance is designed to upright a tipped molar and in the process regain some lost 'e' space. In its simplest form it consists only of a single band on the first deciduous molar and a Halterman wire. The Halterman wire is soldered to the buccal of the band and ends with an elastic hook that is positioned posterior to the distal of the tipped molar. To use the appliance you will direct bond an orthodontic button to the occlusal of the tipped molar. The button should be positioned as mesial as possible. The appliance functions by connecting the ortho button to the Halterman hook with chain elastic. The chain elastic is then shortened gradually over a period of time to exert the force that is used to upright the molar.

A variation of the Halterman involves the use of a Nance appliance that is banded on the deciduous molars. A Halterman wire is then soldered to one or both of the bands. This variation provides much more anchorage and should be considered if the root structure of the first deciduous molars are questionable. Another variation involves soldering the Halterman wire to the lingual of the band rather than the buccal. Either design is acceptable.

Indications:

Tipped first year molar(s).

Contraindications:

None.

Alternate Appliance:

There really is not an alternate appliance that can be suggested, however, if the second deciduous molar is present some practitioners prefer to upright a 6-year molar by using ligature wire. The technique involves threading the ligature wire through the gingival embrasure between the second deciduous molar and the 6-year molar and looping it over the occlusal embrasure. The wire is then looped several times, tightened to provide adequate pressure, then tied off. As the tooth uprights slightly the wire is retightened to maintain pressure. Although this technique has the potential to be successful it is dependent on the involved teeth having extremely tight contacts and on the tooth structure of the involved deciduous molar. A precaution with this technique involves the potential of injury to the tongue/cheek by the tied ends of the ligature wire.

Clinical Procedures:

1. Size a band for the deciduous molar or indicate on the lab slip that you want us to do it for you.
2. Take impression of the arch needing treatment (only the affected quadrant is required).
3. Pour the impression in lab stone.
4. Send the case to the lab with a completed *Orthodontic Technologies* prescription form. Please note, we automatically provide chain elastic for your case but will only send an orthodontic button for direct bonding if requested. Just let us know that you need one and we will send it with the case.

Delivery Suggestions:

1. Trial fit the appliance. Adjust the wire if needed. Check that the wire does not impinge the tissue and that the elastic hook is accessible.
2. Deliver the appliance, cement the band.
3. Connect the button and the hook with elastic in such a way as to exert pressure between the two. Cut off and save the excess elastic.
4. Give instructions to the patient on the wear and care of the appliance.
5. Reschedule the patient for a check up and to change the elastic in 1 week.
6. Reschedule thereafter to change the elastic every 2 to 3 weeks.

Length of Treatment Time and Results Expected:

Although a treatment time of 1 to 3 months would be considered normal, the length of treatment will vary on a case by case basis.

The treatment goal is to upright and achieve a normal angulation of the long axis of the 6-year molar and to establish the correct position of the molar within relation to the anterior-posterior dimension of the arch.

Stabilization of the Teeth and Bone Following Removal of the Halterman appliance:

If the second deciduous molar is not present when the appliance is removed then a space maintenance appliance will be required to prevent relapse and to prevent it from drifting mesially.