Herbst®

HERBST® BITE-JUMPING APPLIANCE

One of the most common problems presented to the Orthodontist is skeletal Class II malocclusions. In the past, these cases were corrected with surgical procedures, headgear and/or elastic therapy. Today most of these cases can be corrected using the Herbst to inhibit maxillary anterior growth and stimulate the lower jaw to its potential development during the patient's growth period*. Some literature reports that this effect is still obtainable in young adults**

Since the Herbst can be permanently attached to the teeth with stainless steel crowns or bands for the duration of treatment, patient compliance does not present a problem. Even though this appliance prevents the lower jaw from moving backwards, patients can still open and close their mouth easily and fully adjust to the appliance in about a week.

The Herbst has become one of the functional appliances of choice by many clinicians for Class II correction; however, this versatile appliance is also being used as anchorage to obtain a number of other treatment goals. Design options include space closure, intrusion of molars, and anchorage platform for other orthodontic approaches.

AOA is continually seeking advanced technologies, materials and fabrication techniques to provide you with the best up-to-date products and services. With our computer automated laser-welding service, along with the addition of AOA's proprietary cantilever arm to varied inventory of Herbst mechanisms (e.g.; Flip Lock, HTH-Hanks Telescoping and Ormco Hex Screw), AOA has the Herbst solution for your practice.

The AOA advantage of offering a variety of mechanisms allows you to prescribe the best possible Herbst approach for each of your patients. The traditional Hex screw design or the innovative HTH™ with telescoping full lateral movement can be fabricated to your specific design requirements.

The FlipLock®* system allows a wide range eccentric jaw movements while providing a compact comfortable profile. This proves useful when additional components are requested.

The MALU is attached by a ball end pin that fits into the headgear tubes of a buccal tube attachment designed for headgear. Anchorage methods include crowns, reinforced bands or bondable rests. Commonly requested adjuncts include Expansion screws (upper and lower), buccal archwire tubes, and lingual arches.

AOA's sliding archwire tube/axle assembly permits Herbst therapy while the patient is in complete fixed appliances. The generous range of movement allowed with the Flip Lock appliance lessens stress and force on the wire and brackets.

AdvanSync™ represents a breakthrough in functional appliances that may make it possible to treat Class II cases in Class one time. AdvanSync produces stable orthopedic changes while it may advance the mandible to a Class I occlusion in just six to nine months. This occurs while the patient has brackets placed upper and lower 2nd bicuspid to 2nd bicuspid. AdvanSync's arms are 50% shorter than arms used in Herbst appliances, minimizing mouth discomfort.**

The Herbst with the TS mechanism has several significant advantages to its design. First, the mechanism is a self-contained telescope that cannot disengage when the patients open wide, unlike the traditional Herbst which comes apart. This potentially reduces emergency appointments. Another major advantage of the TS mech is the doctor's ability to better position the lower pivots (attachments) near the lower second bicuspids instead of the first bicuspids. By moving the lower pivot distally a full tooth position, the tissue is much less prone to irritation and the patient settles into the appliances more readily.

*FlipLock is a registered trademark of TP Orthodontics, Inc.

**Dr. Dischinger is a paid consultant of Ormco.





^{*}Pancherz, H. Treatment of Class II malocclusion by jumping the bite with Herbst appliance: A ceph Investigation. Am. J. Orthod. 76:423-442, 1979

^{**}Pancherz, H. Hist., Bkgd, and Devel. of the Herbst Appl. Sem. in Orthod 2003; vol 9 no. 1