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Dentofacial Orthopedics/Growth-Guidance Appliances

A common problem presented to Orthodontists is a skeletal Class II malocclusion (deficient lower jaw). In the past, these cases were corrected with surgical procedures, headgear and/or elastic therapy. Today these cases can be corrected using the *Herbst* to inhibit the upper jaw growth and stimulate the lower jaw to its potential development during the patient's active growth period.

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 the 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 most common Oral/Dentofacial Orthopedic appliance used in our office is the *Mini-Scope Herbst* designed to advance the lower jaw forward and stimulating growth to address a growing patient's deficient lower jaw. The forward advancement of the lower jaw also has positive implications for opening the airway in adolescent patients who snore or have other forms of sleep-disordered breathing.

The key to success with the *Mini-Scope Herbst* involves:

- Correct diagnosis of a deficient lower jaw
- Use of an appropriate Growth-Guidance Appliance
- Developmental "timing" corresponding to the patient's accelerated growth-spurt (differs between adolescent females & males)
- Patient cooperation
- The actual growth that takes place for the patient while wearing the appliance.

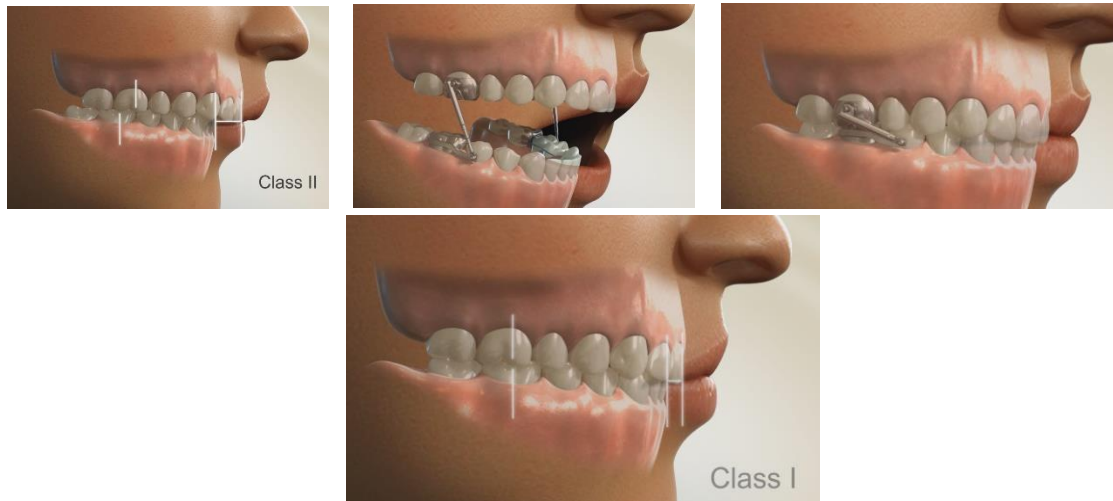


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Dentofacial Orthopedics/Growth-Guidance Appliances (continued)

Orthopedic Effect of bringing the lower jaw forward to help reduce the overjet and improve the bite relationship



(From a Class II to a Class I relationship)

A less common Oral/Dentofacial Orthopedic appliance is an *Open Bite Splint*. Together with use of Temporary Anchorage Devices (TADs), the *Open Bite Splint* is designed to help close the bite in anterior open bite cases by intruding the upper posterior teeth in adolescent patients.

