

Cervical-pull headgear

Cervical-pull headgear consists of a cervical **neck strap** (*as anchorage*) and a standard facebow inserting into the headgear tubes of the maxillary first molar attachments. The objectives of treatment with these types of headgear are to restrict anterior growth of the maxilla and to distalize and erupt maxillary molars. A **major disadvantage** of treatment using cervical headgear is possible extrusion of the maxillary molars. Likely results include: opening the bite, first molars will move distally and forward growth of the maxilla will decrease. **Indications:** Class II malocclusions with deep bite.

High-pull headgear consists of a high-pull headstrap and a standard facebow inserting into the headgear tubes of the maxillary first molar attachments. The objectives of treatment with these types of headgear are restriction of anterior and downward maxillary growth and/or molar distalization and control of maxillary molar eruption. These types of headgear have a more direct effect on the anterior segment of the arch. **Indications:** Class II malocclusions, with increased vertical dimension and minimal overbite.

Straight-pull headgear is similar to the cervical-pull headgear. However, this appliance places a force in a straight distal direction from the maxillary molar. Like cervical-pull headgear, the **indications** are Class II, Division 1 malocclusions (*when bite opening is undesirable*).

Reverse-pull headgear unlike all of the other headgears above, has an **extraoral component** that is supported by the chin, cheeks, forehead or a combination of these structures. It consists of two pads that rest on the soft tissue of these structures. These pads are connected to a midline framework and are adjustable. Side effects include downward and backward rotation of the mandible. **Indications:** Class III malocclusions (*where protraction of the maxilla is desirable*).

Chin cup (*chin cap*): are devices to utilize extra-oral traction to restrain or alter mandibular growth. **Indications:** **Class III malocclusions** (*due to excessive mandibular growth*).

Timing of Any Headgear Treatment:

- Females:

- 8.5-10.5 years old

- Males

- 9.5-11.5 years old

Side Effects of Headgear:

- Unwanted extrusion forces on maxillary molars (*typically found with cervical headgear*) will cause the mandible to move inferiorly and posteriorly
- Negates Class II correction
- May cause distal tipping of molars