

SPOTLIGHT ON CONTINUING EDUCATION

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TruEase™
Bite Corrector Devices

Answers Your Questions about the TruEase Bite Corrector



What is the TruEase Bite Corrector used for?

It is indicated for the treatment of dental and skeletal Class II with mandibular retrognathia, although it can be also used inversely to treat skeletal Class III with maxillary retrognathia. In all cases, it is more indicated in brachyfacial, mesofacial and mild dolichofacial patients.

What are the advantages of TruEase Bite Corrector in respect to other similar appliances?

The advantages are:

- No need for laboratory services to insert it.
- Its fixation system to the arch wire is safe, easy and quick using the SS arch wires of .017"x.025" or .018"x.025".
- Its force is more constant due to a double superelastic NiTi spring.
- It allows lateral movements of the mandible, and therefore it is more comfortable and protects against TMJ.

Are there right and left TruEase Bite Correctors? Do I need a special instrument for its insertion and removal?

The TruEase Bite Corrector is symmetric, which means that it can be inserted on both sides of the mouth. The TruEase Bite Corrector kit includes 2 TruEase Bite Correctors and an adjustment key. I recommend obtaining a spare adjustment key and four spare screws just in case you lose any of them.

How many TruEase Bite Corrector types are available?

There are two types available: a double-lock TruEase Bite Corrector which has its own system used to fix it to the orthodontic arch wire of the maxilla and mandible (which is the one we usually use), and the Anchor Wire, which is fixed to the lower orthodontic arch wire and for extraoral tube of the upper molar bands.

How many TruEase Bite Corrector sizes are available? How do you select the adequate size for each case?

There is a standard size, and small size. When the alignment and leveling are finished in both jaws, and the torque is established, the .017"x.025" SS arch wires should be ligated in both jaws. Ask the patient to occlude in Centric Occlusion (Maximal Intercuspalation), and measure the distance between the distal end of the molar tube of upper molar bands, and the distal end of the lower canine brackets. If this distance is between 27 mm and 36 mm, the standard size has to be used, and if this distance is between 23 mm and 32 mm, the small size has to be used. If the distance is between 27 mm and 32 mm, both sizes can be used, depending on how much we want to forward the mandible. We should not forget that this measure cannot be applied at the beginning of the treatment, but only when the alignment and leveling are finished, and the torque established.

Should midlines be centered when moving forward the mandible with TruEase Bite Corrector, even in asymmetrical cases?

The TruEase Bite Corrector allows asymmetrical advancement of the mandible because the appliance can be inserted asymmetrically when fixing it to the upper and lower arch wires. The upper part should be fixed in the upper arch wire between the first molar tube and the second bicuspid bracket, and the lower part is fixed in lower arch wire between the canine bracket and first bicuspid bracket. In this way, an asymmetric mandibular advancement can be achieved. Dental midlines are centered only if they match with the center of maxilla and mandible respectively. If not, the mandible is moved forward centering the chin and dental midlines will be centered later with oblique intermaxillary elastics.

How long should the TruEase Bite Corrector be in the mouth?

Usually the appliance achieves the effect in 4 months of treatment.

When is the right time to insert the TruEase Bite Corrector?

When the .017"x.025" SS arch wires are ligated, which means, when the alignment and leveling are finished and the torque is established. To achieve the maximal effect as fast as possible, the arches of the case should be coordinated in a position of advancement to Class I. The easiest way to check it is to take the models and to occlude them in molar Class I position. The more adjusted the occlusion, the quicker the TruEase Bite Corrector effect will be.

When should the TruEase Bite Corrector be removed?

After 3-4 months the appliance can be removed to check if the mandible goes back to the Class II or it remains stable in Class I position. If it goes back, the appliance should be inserted again for another month.

Which effects does TruEase Bite Corrector produce?

The TruEase Bite Corrector produces:

1. Distalization of entire maxilla from 1 mm to 1.5 mm
2. Mesialization of entire mandible from 1 mm to 1.5 mm
3. Reaccommodation of the condyle for 1 mm more forward, since it is usually in retracted position in Class II cases.
4. It provokes distal rotation and distoclination of upper molars, which is always beneficial, because the upper molars are usually rotated and inclined to mesial in Class II cases. This helps to achieve molar Class I. The distal rotation and distoclination are limited using the transpalatal bar (as indicated in my syllabuses on the TRUEASE BITE CORRECTOR use).
5. It provokes the upper molar intrusion and counter clock-wise rotation of mandible, which improves the profile due to better projection of the chin.

****With these 3 actions, an overjet reduction for 3-4 mm in 4 months of treatment can be achieved.*

6. It provokes upper molars intrusion and lower incisors intrusion which compensates the possible overbite increase produced by counter clock-wise rotation of mandible. The TruEase Bite Corrector presents the following advantages over Class II elastics: **1.** The TruEase Bite Corrector does not depend on the patient's cooperation in using the elastics, because it is a fixed appliance. **2.** It carries out a more constant force because the NiTi springs don't lose the tension as elastics. **3.** The elastics also provoke a mandibular advancement, but they also provoke upper incisors extrusion with overbite increase (perjudicial in Class II cases), and lower molars extrusion with distal rotation of the mandible, which puts the chin in more retracted position.

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6. If also vertical elastics are used from upper molars to lower molars together with the bite planes or bite guides in upper incisors, lower molar extrusion is achieved which accompanies the upper molars intrusion and provides the stability for mandibular advancement and counter clock-wise rotation.

****Elastics of 4.5 oz (1/8" or 3/16") are used.*

****Lower and upper molars are extruded, because the upper molars have more anchorage with transpalatal bar and TruEase Bite Corrector.*

7. Possible growth at the level of condyle and glenoid cavity.

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Can TruEase Bite Correctors be used only in growing patients?

It can also be used in adult patients since the needed corrections are orthodontic ones and they do not depend on growth. It is also true that adult patients are more reticent to the use of this appliance and that the effect is better in growing patients.

What can be expected in 4 months of treatment?

Overjet reduction from 3 mm to 3.5 mm (a little bit more in growing patients), overbite reduction in cases of deep bite due to extrusion of lower molar and improvement of the profile.

Are there any other effects?

Yes, an esthetic improvement of the profile and lip closure, as well as the increase of the air ways volume due to mandibular advancement, and consequently, advancement of the tongue and hyoids.

Are there any effects as far as cephalometry is concerned?

Yes, the following is observed:

- Reduction of maxillary depth.
- Increase of facial depth.
- Increase of facial axis angle.
- Counter clock-wise rotation of mandibular plane.
- Clock-wise rotation of occlusal plane.

What is the usual biomechanical sequence?

The usual sequence is:

1. Brackets bonding in both jaws. It is convenient to bond second molars whenever is possible, in which case it is recommended to use convertible tubes in first molars because the omega loops or crimpable hooks will be used to mesial of the second molars and it would be impossible to use them with the normal tubes in first molars.

It is also recommended to use the bands in upper first molars because the use of transpalatal bar (TPB) will be indicated. The TPB can be welded or lingual sheaths can be used.

2. Alignment and leveling. The .014" or .016" superelastic NiTi, Thermal NiTi or Copper NiTi arch wires can be used, depending on the crowding level.
3. Torque establishing. The .014"x.025" or .016"x.022" superelastic NiTi, Thermal NiTi or Copper NiTi arch wires can be used.
4. Working arch wire. The .017"x.025" SS arch wire to which the TruEase Bite Corrector will be fixed. If second molars are bonded, an omega loop to mesial of the second molar tube will be carried out, or a crimpable hook can be used to ligate the second molar tube. If second molar is not bonded, a cinch-back (distal bend) in the arch wire should be carried out on distal of the first molar tube. This is carried out to avoid molar distalization due to the TruEase Bite Corrector use and also to achieve the distalization of bicuspids, canines and incisors. The same process should be repeated in the mandible to mesialize all lower teeth and not only to move incisors and canines towards labial.
5. After removing the TruEase Bite Corrector, the case is finished with the .018"x.025" arch wires if the .018" slot is used, and with .019"x.025" if .022" slot is used. These will be SS or CNA arch wires, depending on the finishing technique.

Is the use of a variation of the usual biomechanical sequence necessary?

After the torque is established and before inserting the working arch wire, it might be necessary:

- To use rectangular NiTi arch wire with reversed curve in mandible, if the patient presents deep Spee curve.
- To activate upper TPB if transverse coordination of jaws is necessary.

Is there any other type of precautions?

Yes, to avoid lower incisors flaring, and having in mind that lower incisors and canines are already in their final position, it is recommended to bond permanent lower canine-to-canine fixed lingual retention which will be also used as retention when the brackets are removed.

Is it used in a different way in cases of increased overbite or reduced overbite?

I recommend consulting the check lists of my TruEase Bite Corrector syllabus, but basically, in increased overbite cases, it is indicated:

- Brackets up to second molars
- .017"x.025" SS arch wires
- Omega loop or crimpable hook to mesial of the second molar tube ligated to the second molar tube.
- TPB adapted to the palatal vault
- Bite Builders bonded to the lingual surfaces of the upper incisors
- Indicate the use of vertical intermaxillary elastics between the upper and lower molars.

In reduced overbite cases, it is indicated:

- Brackets up to second molars
- .017"x.025" SS arch wires
- Omega loop or crimpable hook to mesial of the second molar tube ligated to the second molar tube.
- TPB separated from the palatal vault to provoke major intrusion of molars and to correct reduced overbite
- Lingual buttons bonded to lingual surfaces of upper incisors as a reference for tongue training in lingual thrust and dysfunctional deglutition correction.
- Do not indicate the use of vertical intermaxillary elastics between the upper and lower molars.

Summary:

Overbite	TPB	Bond to palatal surface of upper incisors	Indicate the use of vertical intermaxillary elastics between the upper and lower molars.
Increased	Adapted to the palatal vault	Bite guides or Bite planes	Yes
Reduced	Separated from the palatal vault	Lingual buttons	No



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