Poster nr. **61**

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TWIN *BONDED* BLOCK FOR CLASS 2 CORRECTION: AN *(OLD)* NEW TOOL FOR A SECULAR PROBLEM

IL "TWIN BONDED BLOCK" PER LA CORREZIONE DELLE CLASSI 2: UN (VECCHIO) NUOVO STRUMENTO PER UN PROBLEMA SECOLARE

Aim

The purpose of this work is to describe a new type of Twin Block called by the Authors TBB (Twin *Bonded* Block) for class 2 correction.

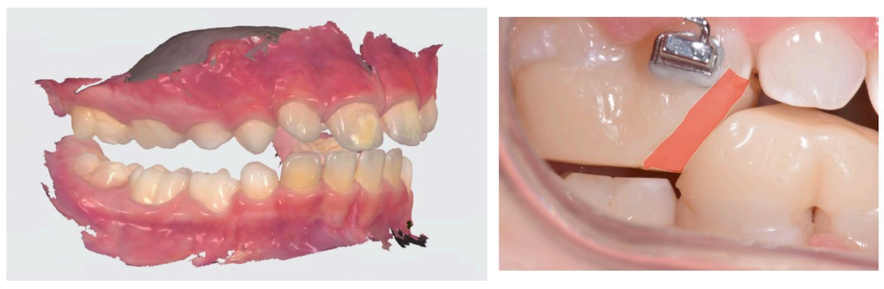
Appliance Design

The realization starts from taking an impression, which can be performed in a traditional or digital way. In both cases, it may be useful to use an anterior wax jig in order to easy guide the patient's lower jaw.
Once the impressions have been developed, the technician will make the TBB starting from the original indications of Clark's work and making **some changes**:

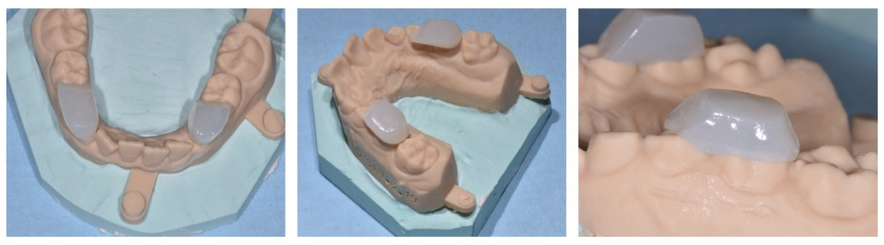
- the height of the bite blocks is reduced to about 3-4 mm to increase patient comfort
- the planes inclination is consequently reduced from 70° to about 60° in order to not have problems during mandibular excursions

The device is thus formed by ***4 small composite resin bite blocks***, the material generally used for posterior restorations: the 2 upper bites have an extension that goes from the distal ridge of the second deciduous molar, to the mesial ridge of the first deciduous molar. In the lower arch, the bites extend from the deciduous canine to about half of the occlusal table of the first deciduous molar.

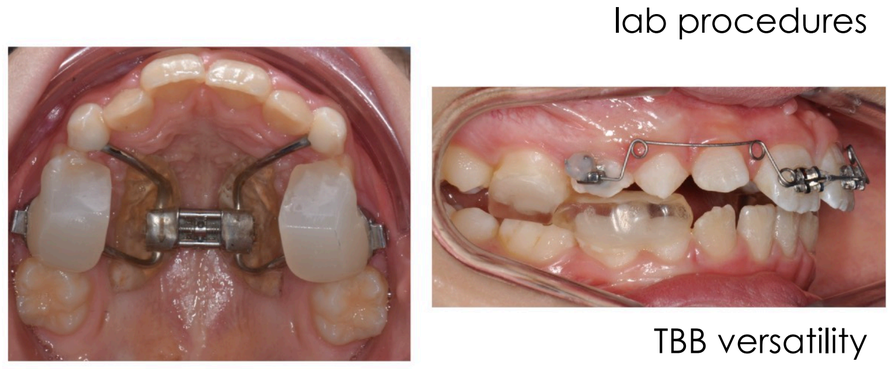
The **bonding** procedure is easy: the teeth are etched paying attention to increase the application time up to 120 seconds, then bonding agent can be applied on the treated surfaces, after rinsing and drying.
The device is extremely versatile, in addition to a very low manufacturing cost. In the case of a low angle patient, if an extrusion of the permanent molars is required, the posterior disclusion allows an automatic extrusion of the upper molars. On the other hand, it is possible to control the vertical dimension with additional bite blocks on the first molars. The TBB in composite resin allows also a simple management of the reactivations of the device.



digital impression - reactivation



lab procedures



TBB versatility

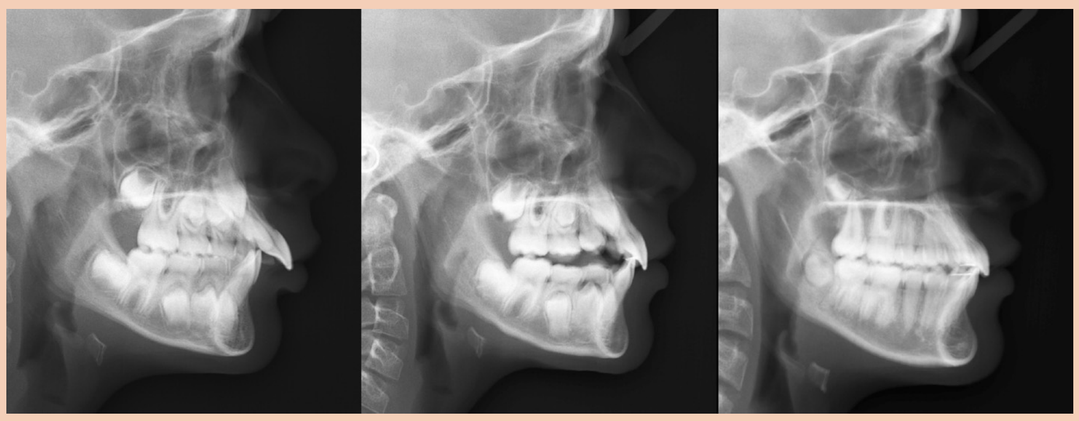
case report

initial records

the TBB appliance

final records

initial before phase 2 end of treatment



initial before phase 2 end of treatment

Conclusion

- It is simple, low cost, and compliance-free
- It works 24 hours a day
- It's extremely versatile, it can be associated with many other devices (upper archwire, rapid palatal expander, palatal bar)
- It has no side effect on the lower incisors and does not cause any pro-inclination
- It can be used in both hypodivergent and hyperdivergent patients

Reference
Easy Class II no-compliance correction using a modified Twin Block: the TBB appliance
Federici Canova F., Beretta M.
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