

RME **full** digital: **step-by-step workflow**

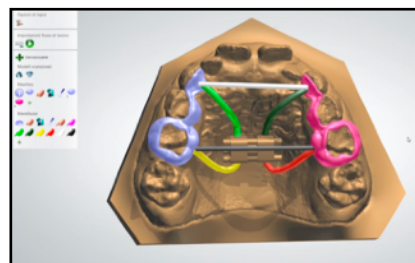
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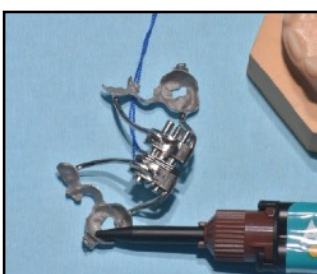
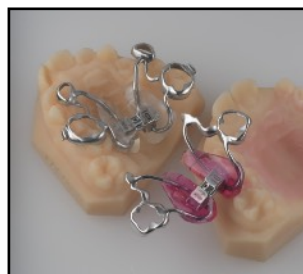
Aim

The aim of the poster is to illustrate step-by-step the **full digital workflow** for a rapid deciduous-anchored **palatal expander**.

Materials and Methods



- It starts with a digital scan of the patient's arches obtained with an intraoral scanner, which is post-processed and converted into an open format .STL
- The upper arch is closed with a base, then we proceed to the design of **customized bands** according to the indications of the clinician who decided the anchorage zone. The bands can be obtained with proprietary or **opensource software**
- Then the .stl file of the expansion screw is placed digitally
- The file is sent to the printing center which proceeds with the realization of the metal structure in laser melting
- The technician welds the molded structure to the real screw
- The dentist bonds the device following this steps codified by the Authors
 - Isolation of the upper arch with disposable mouth opener
 - Cleaning of the deciduous elements with pumice
 - Enamel etching (overetching of at least 60 seconds)
 - Wash and rinse
 - Application of a universal adhesive
 - Application of a GIC (glass ionomer cement) or a dual bioactive cement. In the case of using a GIC, it may be useful to slightly modify the powder / liquid ratio to make the cement more flowing, while the bioactive cement is already an ideal mix for purpose
 - Cleaning the excess
 - Polymerization for 60 sec for each element



Conclusions

The procedure performed by the Authors represents the simplest and most effective way for the creation and cementation of rapid deciduous anchor expanders. This bonding technique can be also applied to any CAD CAM structure in laser melting to be bonded on permanent or deciduous teeth.